

MOTOR AGE

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BUFFALO'S SHOW PRONOUNCED ITS BEST



BUFFALO, March 5—With an attendance of 10,000 persons the best Bison automobile show to date was opened tonight to run the week at the city convention hall on Virginia street. The hall, although large, is not half big enough for the show and there was a marked congestion when the crowd was at its height tonight.

The members of the Buffalo Automobile Trade Association, or rather some of them, after they had been to some of the other shows this year, determined that the decorative scheme here should follow the lines laid down by the practice in other cities. As a result, all pillars have been eliminated, giving a free view of the hall and making it possible to read the sign over each exhibit from practically any point in the big room. The signs, too, are uniform, being white with gold lettering. Each sign is lighted by a row of electric lights placed beneath a reflector at the top of the sign. The floor covering is green, being uniform throughout the hall. There was a time when the local automobile men were inclined to carp at the efforts which were being made to simplify the decorative scheme and to introduce uniformity, but nothing but praise was heard tonight. Not a little of the commendation was given to the great chande-

lier in the middle of the hall. Its 200 16-candlepower lamps were a marked addition to the illumination of the place.

All sorts of people were there. Many in the crowd were women, and there were dealers who said it was not a buying crowd. Whether it was or not, it certainly was a sitting crowd, for many a salesman, upon throwing open the door of a limousine, was surprised to find that two or three women were calmly sitting there. Many persons who came to view the motor cars found that they themselves were on exhibition as they

passed the cars in which show visitors were finding comfortable resting places.

But there really seemed to be a good undercurrent of business. Le Roy Pelletier, who is at present with the Jaynes Automobile Co., said he had two prospective customers for Locomobiles and that the enthusiasm was engendered this evening. Manager D. H. Lewis overheard the remark. He asserted he knew that as many automobiles were sold in Buffalo last year as in all previous years put together and he predicted the sales this year would total as much as for last year and the years before it in a lump.

The exhibits, except for tires, have a wider range than ever before at a show in this city. The tire men have avoided making an exhibit, the Swinehart com-

pany being the only one to take space and the local managers of the big tire concerns were lolling about tonight free from care and worry. The newly opened Buffalo branch of Charles E. Miller's New York automobile supply house is making an exhibit of sundries, as are the O. K. Machine Works, the Kelsey company and several other Buffalo houses. As to automobiles, the range is wider than ever before. The MacNaughton & DuBrooy Co. is showing the Mercedes, Renault and S. & M. Simplex. This is the first time there has been a really serious display of foreign cars at a Buffalo show. The Buffalo Motor Car Co., which until recently had the Autocar and White, is showing the Hotchkiss in place of the White steamer, which Walter Hayes has in an exhibit of his own in the big hall.

There is perhaps only one car in the whole exhibit which has not been seen at other shows this year. It is a giant truck finished on Sunday by the Buffalo Auto-Truck & Motor Co. The big vehicle is 20 feet 6 inches long over all and is 8 feet 4 inches wide. It has a four-cylinder, two-cycle engine placed under the driver's seat in front, a gasoline tank holding 25 gallons and with a carrying capacity of 8 tons. The company, which is new, announces it will build trucks to order. The one on exhibition looks large enough to move a house. The whole showing of commercial vehicles is larger than in previous years, among the lot being the Knox and the Rapid. There is

more evidence than ever before that a determined effort is to be made this year in Buffalo to prove that the automobile is, as Senator Morgan declares it will be—the emancipator of the truck horse. Smallest of the delivery vehicle propositions is the Indian motor cycle delivery rig.

Most of the best known American cars are on exhibition. There are more chassis than formerly and a larger number of limousines. The E. R. Thomas Motor Co. has in its space three touring cars which have been sold to prominent Buffalo men. The idea is a right bright one, giving the exhibit a greater advertising effect. One of the first sales of the show was reported by the George N. Pierce Co.

While it is expected that a large number of men who are best known in the automobiling world either as manufacturers or in some other capacity will attend the show, comparatively few had put in an appearance tonight. Perhaps this is because the show chasing business becomes a bit tiresome about this time of year. Those out of town men who are here have been busily trying to discover some move on the part

EXHIBITORS AT BUFFALO SHOW

Knox Automobile Co.
E. E. Denniston, tops.
Poppenberg Automobile Co., Rambler, Marlon, Corbin.
Jaynes Automobile Co., Locomobile, Pope-Toledo, Pope-Tribune, Oldsmobile, Buick.
American Motor Truck Co.
Buffalo Auto-Truck & Motor Co.
Buffalo Automobile Exchange, Haynes, Franklin.
Walter Hayes, White steamer.
Buffalo Motor Car Co., Autocar, Hotchkiss.
Kelsey Co., sundries.
Palace Motor Car Co.
E. R. Thomas Motor Co., Thomas.
Brunn Carriage Manufactory, Stevens-Duryea.
Buffalo Gasoline Motor Co., motors.
O. K. Machine Works, sundries.
Babcock Electric Carriage Co., Babcock electrics.
MacNaughton & Du Broy, Mercedes, Renault, S. & M. Simplex.
J. A. Cramer, Premier, Stoddard-Dayton, Mitchell.
Gray & Davis, lamps.
Automobile Route Book Co., automobile route book.
Swinehart Clincher Tire & Rubber Co., tires.
Charles E. Miller, sundries.
Badger Brass Mfg. Co., lamps.
Kane & Champlin, Reo.
George N. Pierce Co., Pierce.
Centaur Motor Co., Peerless, Winton, Northern Cadillac.
Cleveland Cycle & Auto Co., Cleveland, Waverley.
Warner Instrument Co.
Hartford Suspension Co.
Gloucester Cycle Co.
National Battery Co., batteries.
Thomas Auto-Bi Co., Thomas Auto-Bi.
Edmunds & Jones, lamps.
Neal, Clark & Neal, Indiana motor cycles.
Weed Chain Tire Grip Co.
Thomas Spring & Gear Co.
Buffalo Carburetor Co.
Atwood Mfg. Co., lamps.
Northern Mfg. Co.
Buffalo Auto Station, National.
Knoll & Turgeon, insurance.
MOTOR AGE.
Gall-Webb Mfg. Co.
Ford Motor Co.

of the Buffalo tradesmen to repeat the enjoyable entertainment given on Thursday night of the show week last year. The effort has so far been unsuccessful, but while no steps in that direction have been taken it is probable some sort of smoker or other stag diversion will be held during the week.

Weather conditions were perfect. March usually is a cold month in this city, but the present winter has been unusually mild and the present outlook is that the men who handle the demonstrating cars will have a much easier time this year than in the past. Tonight there were something like 100 cars standing in the streets around the hall and it is a fact that the advent of the show has increased the number of automobiles on the streets by about 50 per cent. The daily program for the week is the same as last year—a trade session each morning and sessions for the general public each afternoon and evening. The subject of an open air show in the coming fall is being quietly mooted by a few wise ones, but little tangible expression can be obtained for or against the scheme.

QUAKER DEALERS FARED WELL AT THE SHOW

Philadelphia, Feb. 5—While in the nature of things each succeeding local automobile show surpasses its predecessors, and the phrase "most successful show ever held in this city" truthfully expresses the state of affairs at the conclusion of each annual fixture, such commonplaces are entirely inadequate to describe the superiority of the show which closed Saturday night over those of former years. If it could be expressed in figures, a degree of betterment of at least 250 per cent would be a moderate estimate—and this comparison would cover relative size, attendance, management and business done. That is to say, the fifth annual automobile show of the Philadelphia Trade Association was by far the largest, best attended, best managed and most profitable show to the exhibitors ever held in this city.

Philadelphia, unlike other large cities, possesses no centrally located building of sufficient size to house an automobile show. The southern pavilion of export exposition building is so situated—four blocks from the nearest trolley line, and 2½ miles from the city's business center—that no patronage can be expected from the army of idlers that usually congregates in the down-town districts. Nobody who went to last week's show "just dropped in for a few minutes." And yet something over 65,000 admissions

were rung up during the 7 days of the show. As regards size, the numerous make-shifts adopted by the management to house late-comers—even to the erecting of a derrick to hoist a dozen exhibition cars to the upper floor—will bear out the claim of last week's show being the largest ever, especially when the 40,000 square feet of the lower hall is borne in mind.

And then as to management. The methods of Manager Campbell caused a little friction in some quarters; but he had all the details of a big show to look after almost unaided, and it is not to be wondered at that some of the little things were overlooked. But with glory enough for all, these shortcomings were soon lost sight of.

Coming to the main object of such exhibitions—the immediate or future benefit of the exhibitor—that was where the show scored strongest. In a tour of the big building on Saturday the MOTOR AGE man failed to find a solitary exhibitor who was not satisfied with the results—some of them were elated, others enthusiastic, many delighted. Few of the exhibitors of cars failed to land orders—some of them in the 'teens—while as to promising prospects, they were innumerable, and the coming weeks are sure to bring forth a harvest from the seeds planted during the show. Of the 115 complete cars on exhibition no

less than fifty-seven were sold, the majority being delivered at the close of the show, some of them immediately. Agencies were placed at a rate which would make even a national show promoter feel pleased, and a direct result of the show will be the establishment of at least three branch houses here within the coming month. The denizens of Sundries hall were not overlooked in the general rush of the Philadelphia automobiling public to spend its money. Tires, horns, lamps, shock absorbers, oils, every sort of sundries, in fact—not even excepting automobile insurance, of which there were three purveyors in the building—were bought right and left, and Saturday night found every man jack of them highly pleased with his week's work.

What would have been the results had the national export exposition building been located on Broad street, say, can only be imagined. Suffice it to say, the promoters of the show, despite handicaps, will realize a handsome—"beautiful" might better express it—profit. The location of the show building made the demonstration feature a huge success. Headed by the Knox and Reo buses, an impromptu free automobile transportation line, including the half-hundred demonstration cars, made Thirty-fourth street from Chestnut to the entrance dangerous for pedestrians. The

common citizen, bound to or from the show, had only to ask, and he and his flock were whisked to the show or to the cars instantly. It was an easy solution of a transportation problem which the show management had looked forward to with no little concern. It is estimated that fully 40,000 free rides were handed out during the week.

One sure result of the successful week will be the addition to the Philadelphia Automobile Trade Association of every concern in this city in any way identified with the trade—the object being an early move for a record-breaking show in 1907. The installation of a heating plant in the main building of the export exposition will put at the disposal of the management a floor area equal to that of the Madison Square garden and armory combined—and all on one level. After last week's experience there will be no hesitation as to the possibility of inducing the public to attend, and, besides, the Rapid Transit company, whose officials were dumbfounded by the travel, promise to put in a loop to the exposition doors before next winter. There is a movement afoot to put Philadelphia on a plane of equality with other large cities by forming a company to build a huge convention hall, but such a building, even if begun by June 1, would hardly be ready for a show by February next. But whether the proposed hall materializes or not, Philadelphia's 1907 show promises to assume national proportions.

At supper after the show on Saturday night President A. E. Maltby, of the Trade Association, said: "We are all immensely gratified by the success achieved. The transportation difficulties were made for business. It kept the mere sight-seers away and gave us more time to cultivate the people who contemplated getting into the game and those already in who want to plunge deeper—in other words, the buyers. I don't know of a dissatisfied exhibitor. I hope that before next year's show, which we are already planning, every maker, branch manager, agent, dealer and repairer in the city will have joined our association, when we will give the other cities an idea as to just how automobile-crazy staid old Philadelphia is."

Among the half-dozen exhibitors of cars unable to get in on the ground floor, and compelled to call on the riggers to get their cars above stairs, none was more gratified with the week's showing than Manager A. L. Burnett, of the Mors exhibit. With the Mercedes stand but a few yards distant he said he did not feel lonely. Both his show cars were sold, and much missionary work accomplished during the last 5 days of the show.

The experience of the Blakeslee Electric Auto Co., of Cleveland, was a harrowing one. Its exhibit was lost on the road—absolutely disappeared from view—between Cleveland and Philadelphia, and on Sunday night Secretary Charles J. Wolfram, who was in charge of the exhibit, hurriedly

wired to Manager Long, of the Commercial Automobile & Supply Co., of Washington, for a Blakeslee of any old kind. The response was a runabout by fast freight. It arrived late Monday, and the derrick, which had been taken down, was re-erected to swing it to the upper hall, where it reposed in solitary state until the local agent, who also handles the Logan commercial cars, put a gasoline delivery alongside to fill. The Logan representatives, by the way, are to begin a 3-months' demonstration of the delivery wagon for the big department store of Strawbridge & Clothier, and at the end of that time, if the wagon develops within 75 per cent of the efficiency claimed by the builders, an order for eighty-five Logan commercials will be in order. Strawbridge & Clothier have long been contemplating the entire abandonment of their horse-drawn

HUB SHOW OUTLOOK

Boston, March 5—The Boston automobile show, which opens in Mechanics' building Saturday evening next, and the overflow exhibit which will be inaugurated in Symphony hall on Monday evening, promise to be the greatest exhibits of their kind that have ever been held in the far east. Unfortunately, owing to the giving of a concert in Symphony hall on Saturday evening, that hall will not be at the disposal of the show committee until Monday morning, hence this portion of the show will not be given until that evening. During the past few months the committee in charge has worked might and main to accomplish results, and that these are to be of the very best is shown by the list of exhibitors.

delivery service, and only await reasonable assurances of the economy and capacity for service of self-propelled commercial wagons before making the change.

S. S. Thornton, formerly of the New York house of Smith & Mabley, but now manager of the Philadelphia branch, was decidedly skeptical before the show as to the wisdom of having secured space. The five blocks' walk, he said, was a handicap that no amount of advertising or interest could overcome. He retracted handsomely on the last day of the show, however, and said the only criticism he could make was the unreasonableness of Philadelphia buyers in insisting on taking his exhibition cars—no fewer than three Simplexes and a limousine body having been pulled out of the exhibition during the week as a result of the salesmen in the booth.

Manager W. F. Smith, of the local Rambler branch, arrived at the show early one

morning just in time to save the joker of his exhibit. The 1,383-mile nonstop car had been carefully installed in the exhibit—with its precious coating of Pennsylvania soil, which all hands had been duly warned to preserve—and the next morning one of the horde of scrub-women swooped down upon the car with the demon of cleanliness in her eye. Smith surprised her in the midst of her preparations to "clane up the mess," as she termed it. He firmly but politely put his interdict upon the proposition, and impressed upon her the fact that it had cost some hundreds of dollars to get that dirt there, and he wanted it to stay there till after the show. It was there when the band played "Auld Lang Syne" at 11 o'clock Saturday night.

Titman, Leeds & Co., the new Studebaker agents here, had to pay a pretty penny for their show space, if the story going the rounds is true. It appears that the contract was signed originally by the F. A. La Roche Co., but when the latter was relieved of the local agency it held on to the \$400 worth of space it had secured in its own name. When Titman, Leeds & Co. tried to secure this space there was a bull market on at once. There was no other space to be had in the lower hall, and as La Roche held the whip hand they were compelled to cough up the 100 per cent bonus he insisted upon. "But at that," said Mr. Titman on Saturday, "it was well worth the money."

The Keystone Automobile Co., local representative of the Packard, had great difficulty in securing a machine for show purposes. A customer, to whom a car had been delivered last week, had the situation explained to him, and out of the goodness of his heart he allowed his car to repose alongside the polished Packard chassis for a week, although, as he said, "It can do no good, for you people who say you are booking no more orders." Manager Wayne Davis could have booked eight orders for Packards, but he was compelled to respond with the stereotyped "output sold."

The Rainier concern will open a branch here as soon as suitable quarters can be secured. J. T. Rainier, the head of the concern, was delighted with the evident impression his car made on the Philadelphia crowds, and decided to open up here at once. Pending the renting of a row establishment—they are very scarce just now—the Rainier will be demonstrated here by the Belmont garage.

The commercial vehicle was represented by the Iroquois seventeen-passenger bus, Knox 3-ton stake truck, Logan delivery, Maxwell delivery, two J. Henry Mitchell Mfg. Co.'s deliveries, the Halsey 4-ton truck and the Reading Standard Cycle Mfg. Co.'s Thoroughbred package delivery. Outside the building the Universal Motor Car Co., of New York, had a 3-ton demonstration truck, while the Knox and Reo buses gave constant practical demonstrations of their usefulness in the transportation line.

BID FOR THE CUP RACE

Nassau County Farmers Fear Vanderbilt Will Be Run Over Another Course

New York, March 6—Alarmed at the declaration of the American Automobile Association in favor of all road races being run over specially-built speedways, should the present efforts to this end meet with success, the residents of Nassau county, L. I., are up and doing to secure the running of the Vanderbilt race again next year in their county.

Petitions are being circulated in Mineola, Garden City, Hyde Park, and other places adjacent to the course, asking for signatures favoring the holding of the big event over practically the same route that was used last October. These petitions will be presented to the board of supervisors at an early date. It is possible that this may be done before the meeting of the board of directors of the American Automobile Association on Thursday in this city, and in case the Nassau county supervisors are willing to grant the request the supervisors may be asked to send a formal application, asking for the race, to the executive board of the A. A. A.

It is said that several hundred names have already been secured to the petitions. Two of the three members of the Nassau board of supervisors are in favor of granting the request. Supervisor Seabury, of Hempstead, is not wholly in favor of the use of the public roads for high-speed contests, but it is not believed he will interpose any serious objection if it is the majority wish to have the race on Long Island again.

It is practically assured that the cup route of 1905 will be the basis for the cup course of 1906. The Nassau circuit is favored by W. K. Vanderbilt, Jr., donor of the trophy, and by Mr. Morrell. There is a general desire, however, on the part of interested persons that the dangerous S turn at Albertson's and the dangerous turn at the Guinea woods be avoided. To do this it is possible that a new route will be selected from the Bull's Head turn, in the North Hempstead road, to Lakeville, thus avoiding the Bock road and Willets road, which are the poorest stretches in the old course. The Jericho turnpike, East Norwich road, North Hempstead road and Lakeville road, it is believed, will remain a part of the new route.

That these changes are necessary is believed by all, and when they are made the Nassau county course ought to be as near ideal as it is possible to make it. With these danger points cut out, the next Vanderbilt surely will see some startling speed figures, and the record, now held by the Florio cup race in Italy, should be brought to this side of the Atlantic. Lancia showed the speed possibilities of the circuit last fall when he maintained

an average of 71 miles an hour for almost the entire race. What, then, can the 1906 crop of drivers do when the bad spots are eliminated? While it is believed Bob Morrell is out of A. A. A. harness for good, still his recommendation of the old course will have a lot of influence with the new racing board, so it would seem that the farmers have no cause to feel alarmed. Still, all this agitation is bound to do good in the way of convincing the motorphobists that all farmers are not to their way of thinking.

R. F. D. MEN INTERESTED

Holland, Mich., March 5—Along with the good roads reform, which holds the whole state of Michigan in its grasp, the subject has struck Ottawa county with special force. Although the roads in the country are in fair shape, agitation is now on for their further improvement. The rural mail carriers—for to no one more than the rural carrier is good roads important—have banded into an effort to make the farmers see the error of their ways and as a result Ottawa county is assured of having better roads in the near future. The subject was discussed and the agitation started at a meeting of farmers and rural carriers of the county at the Brinkman schoolhouse near Graafschap, when President Anthony Rosbach, of the Ottawa County Rural Carriers' Association, explained the methods of improving rural highways and also told of the poor condition of some of them in this vicinity. The farmers seemed to take kindly to the idea of helping in improving the roads and will start the work as soon as the weather permits. A novel method of dragging the highways will be utilized. A drag, which can be made by any handy farmer, will be used. There is no patent on the simple but useful invention and if used after a rain it will level up the road, fill in the ruts and keep the roads in good condition. The drag is made by splitting lengthwise a log 9 feet long and 10 inches in diameter, the two sections being held together by pins 30 inches long, which give the drag the appearance of a ladder. It is the intention of the rural carriers to keep up the interest by holding a series of meetings and induce, if possible, all the farmers in the county to take part in keeping up the highways.

CONSULATE ELECTION

Pittsburg, March 5—The Pittsburg consulate, American Motor League, has chosen these officers for the ensuing year: President and senior counsel, Paul C. Wolff; junior counsel, M. F. Leslie; secretary and treasurer, John A. Hawkins; governors, Florence H. Abbott, A. C. Gauger, J. E. Moore, T. W. Rudell and G. C. Glass. The consulate decided to become a part of the Pennsylvania Motor Federation. The Pittsburg chapter has ninety-five members and will lose no time in rushing the work of putting up signs.

NEW BROOM IS AT WORK

Many Changes in A. A. A. Committees Expected with Farson and Gorham in Charge

New York, March 6—It seems pretty well assured that the outcome of Thursday's meeting of the directors of the American Automobile Association will show a pretty clean sweep of the old slate and the substitution of new blood at the head of the important committees, particularly those having to do with touring, laws, highways and racing. The present incumbents in order are: Augustus A. Post, John B. Dill, Albert A. Shattuck and Robert Lee Morrell.

President Farson, who has been in conference with Secretary Gorham and the other leaders for several days, left for Chicago last night. It is pretty generally understood he favors new blood throughout as an accompaniment to the election of a new president and secretary. No aspersions on the ability or zeal of present incumbents are intended.

Robert Lee Morrell has declined to serve again as chairman of the racing board. Indications point to the appointment of another New Yorker in his place. It is understood also that the former secretary, Batchelder, will be on the new racing board.

It seems certain Sidney S. Gorham, the new secretary, who is a lawyer, will have important work to do on the law committee, of which there seems to be a possibility that he will be the head. This work will be the drafting of a uniform automobile law along lines likely to secure passage in the states, a feature of which will be the mutual recognition of licenses. It will at least be a practical desideratum to be striven for.

An important matter to be considered at Thursday's meeting will be the protest wired from California against the appointment to places in the racing board of men having financial interests in motor car manufacturing companies, accompanied, it is understood, by the direct statement that the present chairman is a stockholder of the Locomobile Co. of America.

Sidney S. Gorham, of Chicago, the American Automobile Association's new secretary, arrived in town last Friday and at once took charge of the association's office at 31 West Forty-second street. Since his arrival he has been in constant conference with A. G. Batchelder, the retiring secretary, as to the details of the office; and with John Farson, the new president, as to the future work of the association. The new secretary has politely declined to outline the policy of the incoming administration pending the first monthly meeting of the new directors, when the appointments Farson has decided on will be announced.

Mr. Gorham has been most cordially re-

ceived by the New York fraternity and has made a most favorable impression. The general opinion here is that the A. A. A. was wise in choosing its officers this year from the west, with the additional advantage of their being able to be in touch with the east as well. Mr. Gorham says he wishes it understood that he is a Chicagoan; that he will retain his offices and interest in the Illinois association and Chicago club; that his law business in Chicago will be continued, and that his visits to his home will be frequent.

SMALL CAR TEST

Paris, Feb. 24—Interesting results are being shown in the 6-day endurance test for tri-cars and runabouts, held under the auspices of Les Sports. The run is one of endurance pure and simple, and the system of marking credits is based entirely upon the strength, reliability, steadiness and perfection of the cars, tires, chains, motors and steering apparatus. Up to the third day, over roads especially chosen for their roughness, a Griffon tri-car and a Gregoire runabout had covered 375 miles of the 750-mile course without either incurring a single penalization. Snow, mud, rain and frozen roads have been traversed with the motors working in perfect order and not a puncture, break or strain to be found. The 75-mile run set for each day has had few terrors for the machines and their drivers. A Vulpes runabout and an Austral also did well. The Vulpes was entered in the coupe des voitures run last November.

MORE MOTORPHOBIA

Trenton, N. J., March 6—Special telegram—More drastic automobile legislation is threatened. Senator Cornish has introduced a bill making it a misdemeanor punishable with a limit of \$500 fine and 6 months' imprisonment for a refusal to slow down to 7 miles an hour when requested, and for driving a car a mile faster than 2 minutes. Another bill introduced by Senator Cornish makes it a misdemeanor for any vehicle to keep to the right of the road. It is reported that Senator Frelinghuysen has consented to still further amendments to his bill, and that the prospects of securing more reasonable legislation are a trifle brighter so far as he is concerned.

TO DRIVE TO HUB SHOW

New York, March 5—By way of an inaugural of the touring season and in celebration of the opening of the Boston show E. S. Partridge and Tom Moore, of the Deauville Automobile Co., are planning a 1-day run of newspaper men from the metropolis to the hub. The party will start at 7 o'clock next Saturday morning, lunch at Hartford and dine at Boston. Arrangements have been made to give the visiting scribes a preliminary view of the show from 7 to 8 o'clock, as they are booked for a theater party that night.

MIXED MEET IN SOUTH

Jacksonville Will Run Races for Automobiles, Motor Cycles and Bicycles in April

Jacksonville, Fla., March 4—The Jacksonville Automobile and Motor Boat Club announces it will hold a spring meet on the Atlantic-Pablo Beach course, April 9, 10, 11 and 12. On the first day will be held bicycle and motor bicycle championships, while the other 3 days will be devoted to the automobiles. The full card is as follows:

Monday, April 9—American straightaway motor bicycle championships; 1, 5, 10, and 100 miles.

Southern motor bicycle championships; 1, 5 and 10 miles, run all in one race.

Five-mile motor bicycle open handicap.

One-mile interstate motor bicycle championship, open to Florida and Georgia.

One-mile bicycle race, open to professionals.

Five-mile bicycle race, open to professionals.

One-mile handicap race, open to professionals.

Two-mile bicycle race for state championship, open to Florida amateur riders only.

One-mile amateur bicycle championship of Jacksonville.

Five-mile amateur interstate bicycle handicap, open to Georgia and Florida only.

Tuesday, April 10—Automobile record trials for all classes at 5 miles.

Interstate championship, Florida vs. Georgia. For regular stock cars, all powers and price. Distance, 5 miles.

Southern championship. For stock cars, fully equipped, less lamps and muffler; all prices. One mile, best two in three heats.

Five-mile Florida championship, all powers and price. For stock cars, fully equipped, less lamps and muffler. Open to Florida residents only.

One-mile Florida championship; same condition as 5-mile.

Wednesday, April 11—Free-for-all and record day.

Record trial for all classes of racing cars, 1 mile.

One-mile heavyweight class, all powers; best two in three heats.

Five-mile heavyweight, gasoline cars only.

Ten-mile handicap, all classes and powers.

Twenty-mile heavyweight, all powers.

Sixty-mile heavyweight, all powers. For Sara Bernhardt trophy.

Thursday, April 12—One mile, best two in three heats, for stock cars, \$2,000 and under; owners of cars must drive. Muffler and lamps can be omitted.

Two miles, for stripped stock cars, handicap; best two in three heats.

Five miles, for stock cars, \$2,500 and under; must be fully equipped, less lamps and muffler.

Five miles, for stock cars, \$1,000 and under; cars must be fully equipped, less muffler and lamps, and owners of cars must drive.

Any unfinished races will be run this day.

This will be Jacksonville's first attempt in the meet line, but the promoters feel that they are offering a program that will appeal to the motorists more strongly than did the Ormond affair, where the absence of real competition caused a lot of dissatisfaction among the tourists who spent their time and money only to see a few cars go whizzing by. It is not anticipated that any such record-breaking will materialize, for the Darraq may not be here, but it is believed the people who come will get a good run for their money. The beach over which the races are to be run is pronounced to be as speedy as any in the world; in fact A. G. Vanderbilt was so impressed with it he seriously considered sending his 250-

horsepower speed monster after records over these sands. It is believed he will send Sartori here for the meet. The motor cycle and bicycle races in connection with the automobile events are expected to add variety to the entertainment. It will be remembered Ormond frowned upon the attempts of the motor cyclists to break into the game, so Jacksonville is going to give the two-wheelers all sorts of chances to show just how fast they really are and how they compare with the automobiles in the way of speed. The bicycle meet will also be a novelty, it being asserted by the club that this will be the first attempt to run beach races for this type of two-wheelers.

WHITNEY CLAIM THEIR HOPE

London, Feb. 24—It seems that the situation in France with regard to the Renault patent is still unsettled. At the meeting of firms, apparently willing to agree to become licensees under the Renault patent, which was held in Paris on January 22 last some hitch arose which prevented the matter being signed and sealed as had been proposed. The terms of the original license were greatly modified and even though it is expected the signatories will not be debarred from at any time commencing an action in the French courts for annulment, it would seem to point out that the Renault people are not at all confident of their ability to uphold what they have secured. It is not the usual custom of commercial firms, and especially French firms, who possess an inviolable patent of this nature, to give way on vital points, and to leave themselves open to continual legal harassments. A subsequent meeting took place February 10 at the French Automobile Club but, like the other, it came to nothing. It is said that the Panhard, Mors and Cottureau firms are the principal French manufacturers who stand outside these negotiations. So far as the British trade is concerned, the situation rests principally on the anticipation afforded by the Whitney patent, and while it is still possible for Renault to amend his claim so as to avoid conflict with Whitney, it is not at all probable that he will be allowed to do this, should he attempt it, without long and costly litigation with the British trade.

NEW YORK'S OUT-DOOR SHOW

New York, March 7—Special telegram—It is now practically settled that the New York Automobile Trade Association will permit an open air show and carnival during the last 3 days in May, which will include Decoration day. Negotiations are in progress to secure Empire City track, and Alfred Reeves as manager. The idea is to hold the show under the grand stand and in a monster tent and, perhaps, also beneath a shelter extending from the grand stand over the lawn in front. No racing is contemplated, the track contests being confined to fuel consumption, hill climbing demonstrations, and then utility tests for the cars.



MOTOR AGE

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WHAT AN OPEN-AIR SHOW MAY DO



MANUFACTURERS of automobiles are beginning to realize that in this day of intense competition the selling season, which practically dates from about the beginning of the annual shows, is by far too short for such gigantic enterprises as the modern motor car concerns have come to be with their immense factories and the great amount of capital invested. Almost annually for the past several years it has been pointed out that no manufacturing business can hope to survive if it crams all its work into a few short months in the spring and early summer, and this one fact is the reason for the plea for earlier shows. The larger and more completely organized concerns have begun to realize this, have taken time by the forelock and have gone ahead with their early manufacturing and early delivery process, with the result that they—and they are but few in number, too—have been able to keep their respective plants fairly well in operation pretty much the greater portion of the year.

The competition that is springing up each month is rapidly changing the state of affairs that existed but a year or so ago and today it is realized that as competition increases the season must naturally be extended beyond the few months that are now devoted to manufacturing and to disposing of outputs. It has been realized that in order that the factories shall declare reasonable dividends the period of manufacture must be extended, that a more liberal allowance of time must be made for the operation of machinery and use of tools before a change in design is made. The process of evolution has, it is true, been responsible in most cases for the short periods of manufacture, for no sooner has one year's models been placed under way than work on another year's models has been begun, with the necessity of new tools and new parts and a consequent hustle to produce samples for the winter shows, much less samples for agents.

It is probably the hope of the promoters of the open air show that this will be a means of extending the time of manufac-

turing, with the eventual hope that the buying season will have begun in the fall rather than the spring, and with the ultimate result that seasonable goods will have become things of the past. There are makers who are satisfied that the shows have already served their usefulness, but this opinion is not entertained by even a very small minority. It shows the feeling that today exists and that may grow, however. There can be little doubt that the shows, while requiring a considerable outlay of money, prove extremely profitable in the end. They have been responsible, to a large extent, for the popularity of the automobile, and it would be fatal to the industry to give up now. The fall show, however, will be the means of producing a vast number of early buyers, so that when the makers of automobiles can know what they desire to put before the public at an early date they will be enabled to go on with manufacturing and selling, thus by this means adding several months to the present short season. When this is accomplished the makers will find some means for continuing their work so as to extend it practi-

A NEW OBJECTION TO THE MOTOR CAR



IT REMAINED for a dinky suburban police chieftain with a big handle in front of his name to discover that automobiles injure macadam roadways and do not improve them; on these grounds he would fain have automobiles off the earth.

It probably has not occurred to the high-sounding-titled gentleman of Evanston, Ill., that possibly the shoes of horses, the solid tires of delivery wagons, nature's rains, the farmers' chickens and other things also have a hand or foot in helping along destruction of improved highways. Is it to be supposed that highways are to be embalmed or put in a glass case and their use forbidden because of danger of aiding in their eventual destruction? Are highways for use or for beauty alone? Are highways for the use of all citizens or all taxpayers or only for the liveryman and the owner of the grocery wagon? Are

cally over the entire year, with the exception of a few weeks needed for repairs and inventory taking. This is the annual program in all large manufacturing industries and the building of automobiles will prove no exception to the rule.

Such a scheme means the eventual discarding of the present season model, the manufacture of which is detrimental to the maker, the seller and the buyer. The buyer will not always be of the opinion that he must have a new car each spring—he will need a new car only when his old one has ceased to serve his purpose, or when it is worn out. He will buy a new one then, and that will be at any time of the year.

To discard the season car means a saving not only to the maker but to the seller and to the buyer. The maker will have a more secure business and will be able to put his goods on the market at smaller cost and with less risk; the seller will have a steady trade all the year round and a better average in the matter of overhead expenses; the buyer will naturally, as a result of competition, profit not only by the saving that comes to the maker but that which comes to the seller, and as a result there will be a better business and a greater field than there is today, with profits materially increased and with greater stability for the industry.

Whether the proposed fall open air show will be the means of accomplishing this time alone will tell, but there is every indication that this will prove the result. There is little doubt that the promoters have this in view, although they have not so expressed themselves; the promoters are the members of a committee named by the automobile makers, and it is natural that they seek some solution of a problem that has been before all the makers for some years. If the open air show shall have accomplished this desire it will have served its purpose well.

we still in such a state of antiquity that a modern affair cannot be appreciated? Cannot one set of people have something for its own convenience and amusement without the other set wishing it all the trouble that can be trumped up on earth and a little more in the hereafter?

The chief of police referred to is a silk-gloved gentleman who has made as much trouble for automobilists as was within his ingenuity and his power, and since his power to cause more trouble has not been extended he has taken the next best course and exercised his ingenuity to harrass, without first having taken into consideration the fact that the roads are for the use of the people and not for the use of horses alone. It might be explained, also, that most people rather expect roads to be used and to suffer more or less in course of time. The roads are built for the use of the people.



Why not have an open-air motor boat show in connection with the open-air automobile show? Detroit and Buffalo could each present strong claims.

Chicago, since its council passed a \$1,000 saloon license ordinance, is to have 1,000 more policemen to watch the saloons—and incidentally the scorchers.

The New York dealers have the right idea in a local show—an open-air affair, with all sorts of tests thrown in. Apparently open-air shows have a taking way about them.

The Jersey automobilists were not asleep when Mr. Frelinghuysen introduced his drastic measure in the legislature and promptly set up a lively howl, with the result that the state senator sought cover by introducing a modified measure. A few more such howls in all parts of the country would doubtless bring results of one kind or another.

There are a lot of people in this world who would like automobiles and there are a lot of automobiles in this world that are for sale. Some are new and some have been used and they range in price from a few hundred dollars upward, but do not always find purchasers. The chief trouble is that in this age of prosperity, when many people have all they desire, many other people who have beer pocketbooks have huge champagne appetites.

Waves of reform always come with changes in administration—they do in most municipal affairs, at any rate—but they don't last long. Will the proposed A. A. A. reform wave fare any better?



Wholesale house cleaning among committees expected when John Farson and Sidney S. Gorham take hold of A. A. A.

New York Automobile Association practically decides to hold open air show and carnival last 3 days of May.

General Manager McMullen and his A. M. C. M. A. associates to inspect Buffalo as open air show candidate.

Nassau county farmers eager to have Vanderbilt cup race run over old course.

Wright Brothers announce results of tests of their aeroplane at Dayton, O.

Philadelphia show pronounced to be best effort ever put forth by Quakers.

Percy Megargel breaks up Indian dance with Gabriel horn.

Importers of foreign cars form association in England.



If the A. A. A. acts favorably on E. R. Thomas' protest against trade men being on the racing board, it may be put down as certain that there are not half a dozen unincumbered men in the game with sufficient money, time and inclination to take up a task that at best is extremely thankless and very arduous.

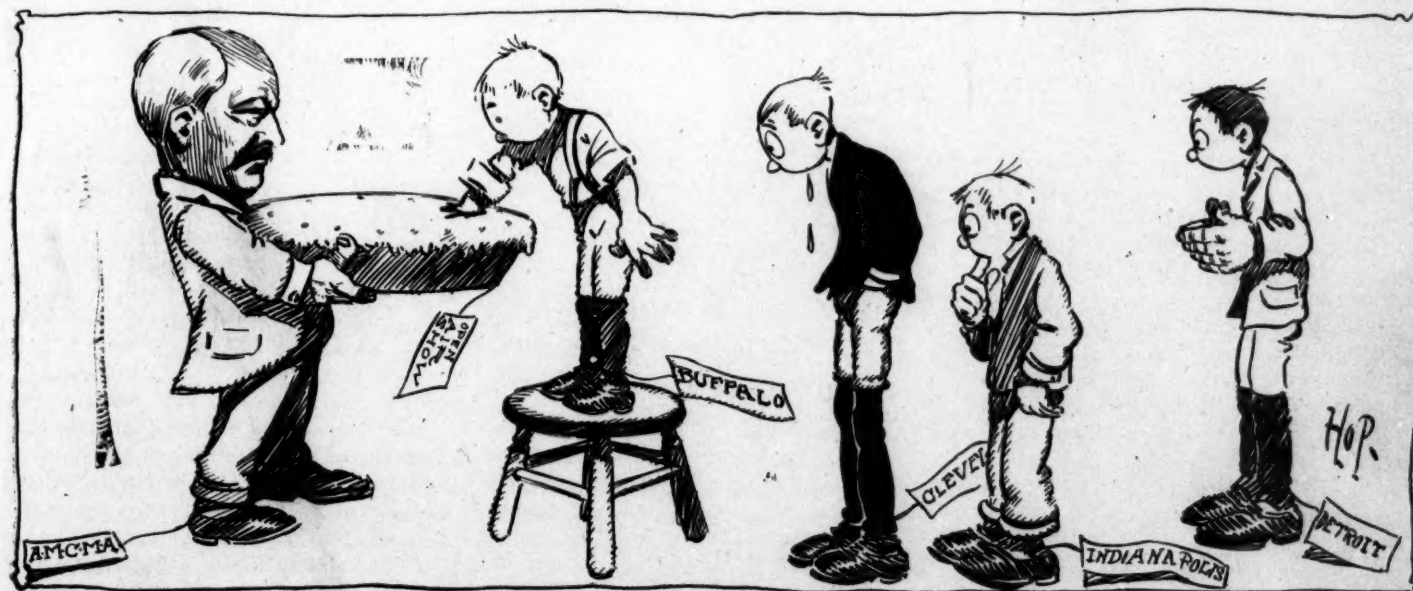
While the people of Boston are looking forward to the opening of their automobile show, the circuit chasers are looking forward to its close.

Those people who are fortunate enough to possess limousines seem to have taken the ground hog's word as literal for the state of the weather for 6 weeks from February 2.

Percy Megargel expected to end his trip during the New York show, held in January. He is still several weeks away, which illustrates to some extent the condition of western roads, as they are called by some people.

The advent of the robin, the angle worm and other signs of spring should be a tip for the country constable to begin setting his speed traps, so that a full harvest may be reaped. He probably only needs the suggestion to begin active operations in order to make a good record.

The authorities of Chicago in their winter crusade on automobilists may have spent some of their force, so that it is among the bare possibilities that motoring in the Windy city will be fairly pleasant during the summer that is coming. The antagonistic suburbs have not been heard from, however, and they will likely take up the cue of meanness where the city authorities left off and do their best to trouble motorists.



WHO WILL PICK THE PLUM OUT OF THE MCMULLEN PIE?

HORN BREAKS UP PARTY

Megargel Tries His Gabriel on Indians Dancing and Is Forced to Make a Quick Getaway

Albuquerque, N. M., Feb. 28—The trans-continental automobile Reo Mountaineer, 192 days out of New York, arrived in this city last Sunday night, coming via Isleta, crossing the Puerco river on the iron railroad trestle and the Rio Grande on the old wooden wagon bridge just west of Albuquerque. The Isleta Indians, a tribe of the Pueblo nation, were holding a dance in celebration of the completion of the new irrigation ditch, Sunday afternoon, as the Reo Mountaineer, carrying Fassett and myself, came through their village of mud houses, and thereby hangs a tale of more than passing interest.

Once upon a time in reading over the advertisement in one of the automobile trade papers my attention was attracted by a horn advertisement inserted by a Cleveland concern which adopted the name Gabriel as appropriate for its particular brand of trumpet. Having heard of Gabriel's trumpet as a boy—in fact, I lay awake upon several nights expecting hourly to hear the sound of the famous trumpet that would end everything—and being further impressed by reading the maker's announcement that the tone was so musical that anyone using it would make friends of the people he passed in the road, I secured one for the Mountaineer.

Now that particular horn has made many friends, and under the impression that "music has charms for the savage"—I forget the exact words or the author, only both are mentioned in my copy of "Familiar Quotations," which, unfortunately, I neglected to bring with me on this cruise—I attempted to assist the Indian musicians who had charge of the orchestra at the Pueblo Sunday dance. The natives, in their latest paints and most fantastic costumes, were dancing away at the pace that kills, trying in vain to keep up with the native drums and other weird instruments.

Fassett felt sorry for them, as we sat watching the sights from the front seat of the Reo Mountaineer, and endeavored to help matters by pressing the lever that worked the Gabriel horn, attached to our exhaust. The horn seemed to appreciate the situation and sent out its loudest notes with all the power that a double opposed 16-horsepower motor can send through its muffler. The Indians didn't seem to appreciate it a bit and started for us at a regular runabout clip. Both Fassett and I felt somehow as if we had witnessed enough of that particular dance and I threw in the clutch. We left Isleta amid a shower of sticks and stones at a pace that the New York city park police would have had a hard time to keep up with,

but then, New Mexico has no speed laws.

I was going to stop and take some pictures of the dance, but the stretch of roadway between Isleta and Albuquerque was so good that I never took out the high speed clutch until we arrived at the bridge across the Rio Grande, then we commenced to see white people again. No, I wasn't scared, only I didn't want to see Fassett burned at the stake; I'll probably need him before we reach New York.

From Albuquerque we will head the Reo Mountaineer toward the Raton pass, which, although still closed to navigation, owing to the great depth of snow that fell this winter, I think we can get over. We can't follow the railroad, as that goes through a tunnel under the mountain, so I think we'll try and scale the summit. One thing is certain, we'll go provisioned and gasolined for a 10-days' trip. Both of us have had enough of fasting and walking miles for fuel, as we did in Arizona and in Oregon.

This city boasts of quite a number of automobiles. The Reo Mountaineer is quartered in a first-class garage, kept by one Dobson, who seems to be the pioneer New Mexico garagist. He certainly deserved a great deal of credit for his work in introducing the automobile in such a wild country as that surrounding Albuquerque. Most of the machines in this city have been brought in from Denver under their own power. I haven't heard of any coming in from Los Angeles the way we have, however, and I guess it will be some time before they do.

In the east we frequently hear of Monte Carlo, which is said to possess some gambling houses. I've never been there, but I am willing to wager Albuquerque has Monte Carlo skinned to a finish in the number of roulette wheels, faro banks, crap tables and public poker games that are going on day and night, openly, for they are all licensed. The White Elephant and the St. Elmo are the two largest gambling houses in the territory. Vast sums of money change ownership every 24 hours over the green cloth tables in these two famous resorts. Americans certainly need not visit Monte Carlo to gamble as long as New Mexico remains a territory.

It will be necessary for us to ship our supply of gasoline ahead from Albuquerque, as none can be had between here and Santa Fe, nor between the capital and Las Vegas, the next large town in this section.—PERCY F. MEGARGEL.

WILL HEAR THE BISONS

Chicago, March 7—Representatives of the American Motor Car Manufacturers' Association will visit Buffalo tomorrow for the purpose of hearing the bid of the Bisons for the outdoor show that is to be held next fall. In the party will be Messrs. McMullen, Briscoe, Newby, Bartholomew and Couzens, of the A.M.C.M.A.

FLY FAST IN THE AIR

Wright Brothers, of Dayton, Make Public Results of Recent Tests of Aeroplane

Dayton, O., March 4—Details of the construction of the airship designed by Wilbur and Orville Wright, of this city, who compose the Wright Cycle Co., are still a secret because of the deal being made by the Americans with the French government, which heard of the possibilities of the Yankee device and sent a representative to this city to investigate. Evidently his trip convinced him, for it is now announced by the Wright brothers that they have contracted to furnish the French government with their flyer for military use. According to the deal made, the French have the exclusive right for only 3 months; after that time the inventors are at liberty to deliver machines on other contracts.

Much mystery has surrounded the aeroplane tests made by the Wrights. They have not been bragging of the utility of their flyer, but results prove that they have an airship that looks feasible. No trials have been made since last October, owing to the rubberneck tendencies of the public. During September and October, though, the Wrights made several long flights, in which they averaged 38 miles an hour. Details of these performances are now made public by the inventors, who announce the following results:

On September 26 they flew 17,961 meters, or 11 miles, in 18 minutes 9 seconds, the stoppage being due to the exhaustion of fuel.

On September 29 they flew 19,570 meters, or 12 miles, in 19 minutes 55 seconds, again stopping through the exhaustion of their fuel.

On October 3 the flight was not measured, but the time made was 17 minutes 15 seconds, a bearing in the transmission becoming hot and causing the test to end.

On October 4 they flew 24,535 meters, or 15¼ miles, in 25 minutes 5 seconds, the hot bearing again causing trouble.

On October 4 they flew 33,456 meters, or 20¾ miles, in 33 minutes 17 seconds, the hot bearing again stopping them.

On October 5 the final flight was made. This time an oil cup had been fitted and the machine went 38,956 meters, or 24¼ miles, in 38 minutes 3 seconds, exhaustion of fuel stopping the flyer.

These flights were not straightaway affairs but around an imaginary circular track in the air. The take-off was secured by means of a little truck running along the ground for 50 yards. It is estimated that the Wright flyer is capable of going 500 miles in a single flight, carrying 200 pounds of gasoline on the voyage.

The Wrights believe Walter Wellman

will not be able to make the north pole in a dirigible balloon, for they say the present type is not capable of such strenuous flights.

"The trip to the north pole cannot be made with any dirigible balloon that has as yet been constructed," said Orville Wright today. "Probably not with any that can be constructed. The best performance of a dirigible balloon, or airship, was that of the Le Baudy brothers in July last, when they made a trip with their dirigible balloon from Chalais-Mendon, France, to a military encampment, 120 miles east. The journey was made in three stages, occupying 3 days. On the first day they covered a little over 56 miles. On the second day they made only a short jump of 11 miles. On the third day they sailed about 57½ miles, and that is the world's record for an airship.

"Even if Mr. Wellman could convey his airship to the farthest point north ever reached by man, he would still have a round-trip journey of over 400 miles to make. But he will probably not be able to carry his apparatus to any such latitude. The farthest north stake was driven by Captain Cagni of the Duke of Abruzzi expedition in 1900. The latitude of that point is 86.33. That is 207 miles from the pole. To reach this spot or any of the other stakes driven in the eternal ice one must repeat the experiences of the explorers who placed them there. There is no highway leading to the farthest north.

"If Wellman begins his flight from any habitable spot, his nearest approach to the pole would be the northern coast of Greenland or Spitzbergen. These are not habitable, but they are approachable, and men of heroic mold can exist there for a time. The northern coast of Spitzbergen is 600 miles from the pole; that of Greenland about 500. Any man who starts in a balloon from either of these points will never come back. The flight of a balloon must be counted in hours. The record is 40, but that has not been approached by others.

"If one could procure an impervious balloon bag, its buoyancy could be maintained indefinitely, but not in the same degree. When the sun shines on your balloon, the gas expands and up you go. Then you must open the valve and allow gas to escape. Otherwise you would keep on going up. Again, a cloud will obscure the sun. Then the gas contracts, the buoyancy decreases, and downward you go. Then you must throw out ballast, or you will sink to earth. One or the other of these conditions is always present, and as a result your gas is soon exhausted and your ballast all heaved overboard. Then down you come, wherever you are. With any balloon bag that has ever been made, the flight of the balloon must be brief. The pole will not be reached by aerial voyage until a better and more practical balloon is invented."

NEW BODY IS FORMED

Association to Conserve Interests of Automobile Importers Is Started in England

London, Feb. 24—The formation of an association to conserve the interests of foreign motor car importers, outlined last week, has become an actual fact. Not because of any overt act on the part of the British Society of Motor Manufacturers, which indeed has not made any further move in the situation, but probably because it was seen that there was a necessity for, and would probably be a considerable scope in front of a body of the kind. Conversation with some leading members of the trade, heavily interested in the foreign car, has led the writer to believe the opinion is largely held that the British Society of Motor Manufacturers is drifting towards a preferential attitude for British motor manufacturers. The people who hold this view are in possession of information and expressions of ideas from the inner side of the society, which are not open to the critics, and it must be upon those foundations that this suggestion has been built, because there is nothing at present in the situation of the society which favors the idea in any way.

The Olympia show, around which the whole situation pivots, so long as the present system of bond and preferential ballot obtains, must be unaffected by any sympathies, however acute, which the officials of the society may entertain, and in this preferential ballot, foreign importers—not, let it be explained, the firms which they represent, but the importers themselves—hold privileges which it is impossible to take away from them unless by recasting the whole method in which space allotments are made. There are a few anomalies in the present situation—such as firms of small account now, who got in early and therefore hold preferences over large firms who were founded or came in later—but on the whole the leaders in the trade are in the most preferential positions in the ballot, irrespective of nationality, and it is not likely that the British firms included in these would be desirous of altering a situation so advantageous to them. But as has been said, the foreign importers are decidedly jumpy on this question of preference, and although nothing is now said, the attitude of the society will largely determine the policy of the Importers' Protection Association.

At present the list of firms in it are: Darracq & Co., Panhard & Levassor, Fiat Motors Limited, de Dion-Bouton Limited, de Dietrich & Co., A. Vedrine & Co., Du Cros Mercedes Limited, Renault Brothers, Mors Limited, W. & G. du Cros, London & Parisian Motor Co., Hotchkiss; Mann & Overton, Richard Brasier; Minerva Motors Limited, Donne & Williams, Rochet

Schneider; Germain Motor Co., Clement Motor Co., Limited, Cannstatt Automobile Supply Association, Gladiator Motor Co., Friswell Limited, London Motor Garage Co., C. G. V.; Chenard-Walcker Motors Limited, Fabry Automobile Co., Itala; British Automobile Commercial Syndicate, Spyker.

It is believed the negotiations between the Society of Motor Manufacturers and the automobile club, which have been pending for probably a year, have now come to a point at which a mutual agreement and acceptance, is not merely probable but practically settled. Although nothing official, or unofficial, is obtainable regarding the points and details of these negotiations, it is said the agreement proposed will be found to cover almost every point of the program of the automobile club which impinges on the motor trade. The society has been actuated by a desire to restrict within commercial limits the enterprise of the automobile club in the matter of touring and similar competitions, which in the opinion of many people constitute an unnecessarily heavy financial tax on the resources of the motor industry, and which do not return to the competitors a reward commensurate with the time they take and the money they demand.

It will probably be found that the club has agreed to limit its program to such competitions as shall be expressly admitted by the society, as representing the trade, as beneficial. On the other hand, the society will agree to discountenance among its members road tests and trials which are not held under the observations and scrutiny of the automobile club officials, and will agree to give all possible support to the official competitions of the club. The club has agreed to a definite policy in regard to the Olympia show, it is said, and in various other items has met the desires of the manufacturers in such a way as to place both parties in practically an unsailable condition—one as a constituted authority and governing body in the sport and the other in everything pertaining to the industry and the trade.

HOOSIERS HAVE HOPES

Indianapolis, Ind., March 5—The movement for the A. M. C. M. A.'s outdoor show in this city is being met with much enthusiasm by the manufacturers, dealers and business men of the city, and it seems that all will be harmoniously united in the effort to obtain the big show. If held in Indianapolis, the exhibit would be located at the Indiana State fair grounds, on the north outskirts of the city. A fine, wide, well-paved street leads to the grounds, and the grounds themselves are well equipped with large buildings that could be used to advantage, if needed. In addition there is one of the best 1-mile tracks in the country, Carl Fisher, prominent in the local trade, is one of the leaders in the movement to secure the automobile plum for the city of Indianapolis.



DOING things in an opposite manner to the other maker might be the conclusion reached after the first examination of the Adams-Farwell car, built by the Adams Co., of Dubuque, Ia. This car can be called original from front to rear, many of the parts being radical departures from accepted lines. In the five-cylinder motor, the cylinders are arranged like the spokes of a wheel and revolve, while the crankshaft with but one throw, remains idle. There is no clutch in the motor flywheel, but two clutches are used in the gearset; in fact, there is no flywheel at all, the revolving cylinders serving instead. The carbureter is not of the float feed type, gasoline being supplied to a constant level chamber by a plunger pump with an overflow return pipe. The oiler is original and control of the motor speed is by holding the intake valves open during a part, or all, of the compression stroke, the mixture being thus forced out of the cylinder and stored in a reservoir, where it can be used by the next cylinder. The clutches are operated by lever instead of pedal, changes in speed are made by two levers carried beneath the steering wheel, and the motor is cranked from the seat through a ratchet device connected with the end of the mainshaft in the gearbox. Hess-Bright bearings are used throughout in the gear set and Timken rollers serve in the road wheels. A step toward conventional lines is found in the introduction of a touring car style of body on the 40-45-horsepower car in place of the regular brougham lines shown in previous years. Coupled with this is the use of a five-cylinder instead of a three-cylinder motor and the introduction of a four-speed and reverse sliding gear transmission as a substitute to the combination planetary and sliding gearset used on some of the smaller cars. Angle steel frames are used on all models, as are semi-elliptical springs; wheels are regularly 34 inches in diameter and carry 4½-inch tires and internal expanding brakes on the rear hubs are used.

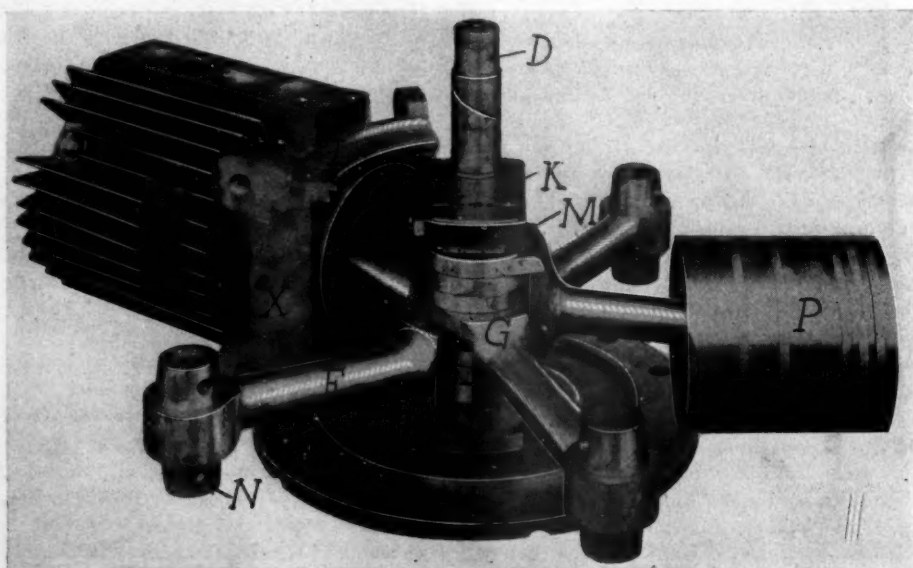
By way of explanation it can be stated

that the motor in the large car has five radiating air-cooled cylinders and that the smaller models are made with three similarly arranged cylinders. These cylinders rotate at speeds from 250 to 800 revolutions per minute, the piston reciprocation being caused by using a stationary crankshaft and having one throw on it. In each revolution of the cylinder each piston goes from the outer end of the cylinder to the inner and out again or the same travel as each piston in the vertical cylinder motor for each revolution of the crankshaft. To understand this movement it is essential to bear in mind that the crankshaft has but one throw to which all of the connecting rods are attached, and that this shaft remains stationary.

A general conception of the five-cylinder 40-45-horsepower motor can be gained from the illustration showing it mounted in the vehicle box beneath the rear seat. It is enclosed by a semi-circular sheet iron box in which the five cylinders are free to revolve. The arm A is a stationary hollow aluminum casting in which is the mechanical oiler, the four feeds from which can

be seen entering the top of the stationary crankshaft M. In a similar arm B is the carbureter, the float chamber and mixing chamber being visible through the spectacle-like openings at the inner end of the arm. Gasoline enters through the pipe N. The commutator is shown at D and is mounted on a short vertical shaft. C shows the tubings along the tops of the cylinders by which the mixture passes to the inlet valves H in the cylinder heads; the exhaust valves K are also in the cylinder heads; G shows the spark plugs and there is a piece very much resembling a spark plug which passes under the stationary quadrant E and through which the current comes from the commutator so that as each cylinder passes beneath it the current goes from it to the piece, thence by the wire to the spark plug. Auxiliary exhaust ports in each cylinder are shown and through these ports the majority of the exhaust passes.

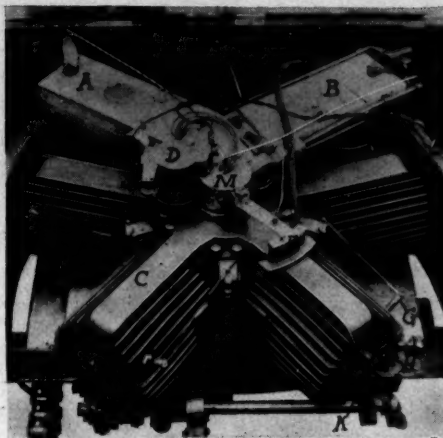
Looking next at the dissected view of the motor, the shape of the one cylinder casting shown is seen. The cylinder wall and head are cast in one piece and on it are thirty-two integral cooling flanges. The



ADAMS-FARWELL 40-45 HORSEPOWER MOTOR DISSECTED

size of the opening in the tube C by which the mixture passes to the inlet valves is apparent, and the exact position of the auxiliary exhaust opening is located. It will be noted that this motor has not a crankcase to which the five-cylinder castings are bolted, but that the inner end of each cylinder is in the shape of one-fifth of a circle, so that the five fit closely together, forming a crankcase, the broad angular face X being bolted to the adjacent cylinder. Each cylinder is bolted at its bottom to the steel plate A, which serves in holding them together and carries on its under surface a bevel gear which meshes with a bevel in the gearset. To the top surface of each cylinder L is bolted a top bronze plate which forms a bearing for the top of the cylinders. The crankshaft D with its one throw is shown and in place around it are the five connecting rods E, each of which is yoked at its inner end, having the arms G and F for attachment to the crankshaft. In passing it should be noted that the crankshaft is not one piece, as in practically all gasoline motors, but that there are two parts. An upper one is marked D and is secured to the lower portion, the top of which can be seen at K. The upper part has a tight fit on the lower and the cross bolt M acts as a pin, holding the two together. By this arrangement the arms G and F of the connecting rods are not split where they attach to the crankshaft. With the upper part D of the shaft removed they can be slipped over from above, then secured in place by the top part of the crankshaft. The connecting rods E are chrome nickel steel hand forgings, subjected to an oil treatment and made hollow throughout their entire length, except at the wrist pin end. Each of the arms G and F is $\frac{1}{2}$ -inch thick, giving a total bearing surface 1 inch wide for each rod on the crankshaft. The useful bearing surface for each rod on the explosion stroke is, however, 5 inches in length, as the bronze bushing surrounding the crank throw invariably remains stationary with the connecting rod of the exploding cylinder, while the remaining four rods turn on the bushing. The crankthrow has a diameter of $1\frac{1}{8}$ inches. At N is shown the bronze bushing for the wrist pin. It is 3 inches long and has a force fit in the end of the connecting rod. The pins are held from rotation by a set screw through the upper ends of the bushings. The ends of the pins are contained in bosses in the piston. The pistons, made of gray iron, carry five compression rings, three rings being beyond the wrist pins and two inside of it. These rings are non-eccentric, lie close in their respective grooves, are ground on three sides and are $\frac{3}{4}$ inch wide each.

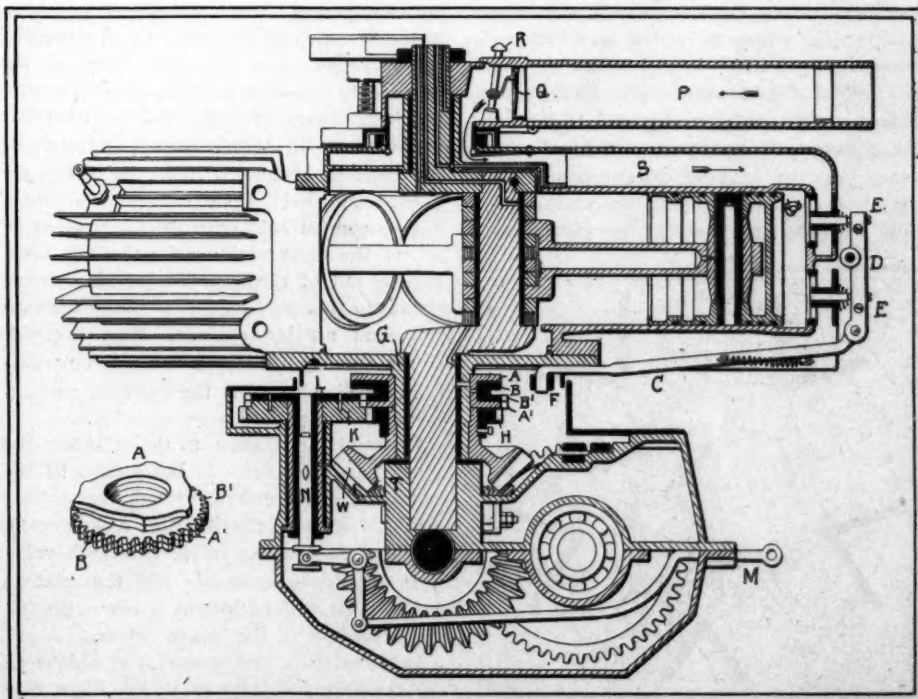
Only one cam is required for opening ten valves, five intakes and five exhausts. There is, however, a second cam needed, which is used to hold the intake valves open during a part of the compression stroke, so the motor speed can be controlled in this manner instead of by the usual spark and



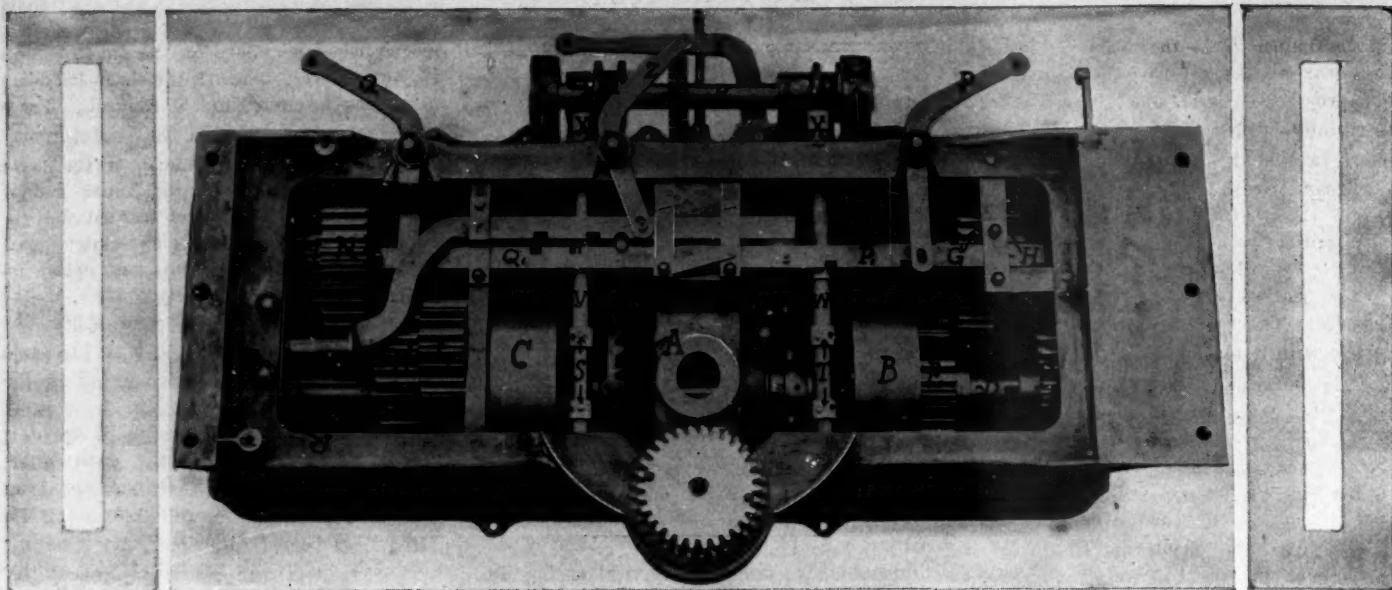
FIVE-CYLINDER MOTOR

throttle regulation. To understand the valve action calls for a close examination of the illustration showing the vertical section of the motor. On the lower left of this illustration is shown the cam A, which operate the valves and beneath it the differential cam B, the position of which can be changed at will, so as to hold the intake open. Ordinarily these cams coincide and act as one in opening the valves, but by a foot treadle the lower one B can be shifted on its axis. Bearing upon these cams is a push rod C, passing along the under side of each cylinder and having connection at its outer end with a rocking arm D, which bears upon the valve stem on both intake and exhaust valve for each cylinder, opening one valve when thrust out and the other when drawn in. In the rocker arm D are adjustment screws E for securing accurate timing of the valves. Each cylinder has its own push rod with a peculiarly shaped footpiece F on its inner end, which bears on the cam. This piece is of sufficient width to bear on the face of both cams A and B. The cam

A is made integral with the gear A1 and cam B with gear B1, and both are loose on the steel hub piece G of the cylinders. The cams are driven through the gear H, secured to the part G and which transmits its movement to them through the gears K and L, the gear K meshing with A1 and L with B1. Through the lever M and the spiral groove device N it is possible to change the relation of gear L with reference to K, pushing it a little ahead, as it were, at which time the relation of the cams A and B is changed. The cam A revolves in the same direction as the motor cylinders but at a speed only one-sixth of that of the cylinders. To understand how it can care for ten valves when traveling at this slow rate calls for an examination of the diagram of the hub on following page. The cam A is shown in full line and B in dotted lines beneath it. The inner ends of the push rods C are recognized, as is the exact shape of the feet F. The figures 1, 2, 3, 4 and 5 represent the several cylinders. It is necessary to note that the cam B has three radii, R1, R2 and R3, and that the cam is triplicate, having three sets of these radii. The arrow indicates the direction in which the cylinders revolve. For every two revolutions of the motor there is a complete cycle in all five cylinders, there being approximately two and one-half explosions for each revolution. When the feet F are on the radius R2, both intake and exhaust valve are closed; when bearing on a part of the cam lower than this radius, like R1, the inlet valve is open, and when bearing on a part higher than R2, like R3, the exhaust valve is open. The two dead center positions are at X and Y, so that in the diagram No. 1 cylinder has just passed the dead center at Y on its suction stroke, the inlet valve being opened; cylinder No. 2 is nearing the completion of its compres-



SECTIONAL VIEW OF ADAMS MOTOR AND GEARBOX



TOP VIEW OF ADAMS-FARWELL SELECTIVE FOUR-SPEED AND REVERSE SLIDING GEARSET

sion stroke, both valves being closed; No. 3 is exhausting; No. 4 is on the dead center X, being about to begin the compression stroke; No. 5 is on the explosion stroke and has both valves closed.

Such terms as annular float, supplementary air valve and throttle are foreign to the Adams-Farwell car, its carbureter being very different from other types. Because the cylinders revolve, it is necessary to conduct the mixture to a central chamber surrounding the top part of the crankshaft, from which the gas can pass to the separate cylinders. It will be best first to understand how the gasoline and air are properly mixed and from another illustration trace how the mixture is conducted to the inlet valves. Looking first then at the carbureter, which is a novel contrivance, gasoline enters from the gasoline tank by gravity flow through the opening A into the well or cistern C in which is a plunger pump with piston B, which is raised and lowered by the driven rod H at the left side. With the upstroke of the piston gasoline is drawn out of the well C through the passage C1 and past the double ball valve into the cylinder of the pump. On the down stroke the balls in passage C1 close the passage, causing the gasoline to

go out by the passage D, raising two balls acting as a valve in doing so and then by way of the piping E to a constant level chamber, the circular end of which is seen at F. To the left of this constant level chamber is a mixing chamber of cylindrical design, the end of which is seen at P. In the center of this mixing chamber is a short vertical spraying nozzle, through which the gasoline out of chamber F passes. In the top of the nozzle is a check valve N. Air enters through the large square pipe K and at the inner end of this pipe opens a flap door M. When this door is opened it raises the check valve in the spraying nozzle, permitting gasoline to flow. Thus with medium motor suction the door M opens and closes for each suction stroke and so the check valve is opened, but on high speeds the door M remains open, as does the check valve in the spraying nozzle. The mixture passes from the mixing chamber in the direction of the arrow Q. The square section pipe L is closed midway of its length, the inner end acting as a reservoir for containing mixture that is liberated from any of the cylinders when the variable compression system is used, it being remembered that when desired the inlet valves can be held open during a part, or all, of the compression stroke. The gases coming out of the cylinder in this manner pass into this pipe L, and from thence into the next suction cylinder. The lever T is for opening the check valve and permitting gasoline to flow, the same as when a carbureter is primed.

In supplying mixture to the cylinders the general plan is shown in the section of the motor. The air enters through the stationary arm P, and passing the flap door Q, which when opening raises the check valve R in the spraying nozzle and the mixture passes as indicated by the arrows through the passage S to the intake valves.

Lubrication of the motor is as unique as are the other features of it. A force feed oiler is carried, as previously stated, in a

stationary arm above the revolving cylinders and in this is a four feed oiler with a casing A, having an oil reservoir compartment B. In the center of the casing A is a revolving cylinder C driven by worm gear E. Within the cylinder is a set of plungers D which are moved back and forth by the cams F and G in the stationary casing in which the cylinder C revolves. These plungers take oil from the reservoir B through the opening H in the base of the casing. When cylinder C has made half a revolution the backward movement of the plunger D forces the oil out through the lead K, which registers with a pipe to K1 to one of the bearings. The remaining plungers D register respectively with the leads K2, K3 and K4. In the sectional view of the motor is shown the oil leads in the top of the crankshaft, with which these oil leads connect. One lead delivers the oil to the top bearing of the shaft, another to the top of the cylinders and the third to the bottom bearing of the shaft, from which the oil is free to drop into the gearbox.

The method of driving from the motor to the gearset is best illustrated in the sectional view of the motor in which the bottom of the stationary crankshaft is shown carried in a casing T, forming the framework of the gearbox and on which all bearings of both shafts of the case are carried. The large bevel gear W is secured to the steel hub piece G, connecting the cylinders and meshes with a large bevel in the center

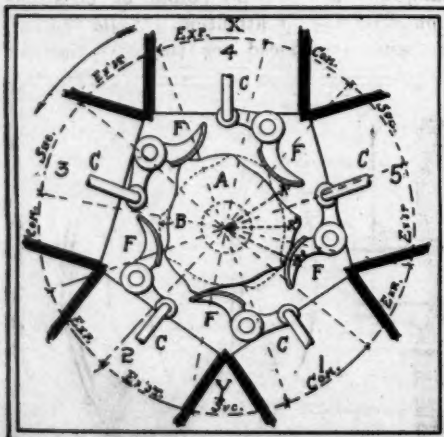
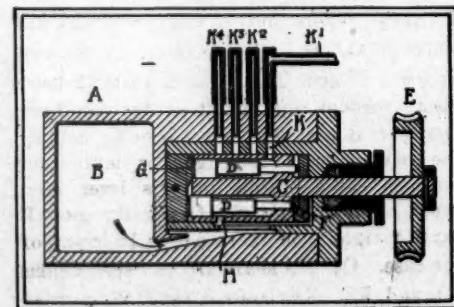
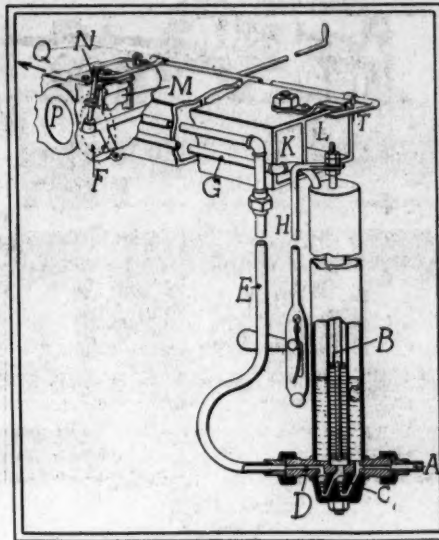


DIAGRAM OF CAM MOVEMENT



ADAMS LUBRICATOR

of the mainshaft of the gearset. The sliding gear of the selective type gives four forward speeds and one reverse, and is essentially different from other sliding gears in that two clutches for connecting the gearset with the motor are contained within the gearbox instead of one clutch, as is ordinarily used in the flywheel of the motor. The illustration shows a top view of the gearbox with the large cover plate removed. The case, made from manganese bronze with a tensile strength of 80,000 to 100,000 pounds per square inch, is made especially strong, as it is called upon to carry the entire motor, being situated directly beneath the motor and directly driven by bevel gear. The gearset is carried crosswise of the car and has the two standard shafts—main and countershaft—the former in the back of the case and the latter carrying the sliding gears in the front. Drive comes from the motor to the large bevel gear A in the center of the mainshaft and to which shaft it is rigidly secured. On this shaft and to the right of the bevel A is one of the friction clutches B and to the left is the other clutch C. In both of these clutches the male parts are fastened to the shaft. The female parts are mounted on sleeves carried loosely on the shaft. The sleeve D on the right half also has secured to it the two gears E and F, which are used for the second and fourth speeds. For second speed the sliding gear G is moved to the left, meshing with the gear E, then the clutch B is engaged. For fourth speed the gear H is thrown into mesh with gear F and the clutch operated as before. The sliding unit composed of the gears G and H is operated through the lever P. To get the first, third and reverse speeds the gears in the left end of the case are utilized. On the countershaft are two sliding gears M and N, which when moved by the lever Q can be meshed M with J, which is entirely hidden beneath the gearbox, for third speed, and N with L for reverse, and with O for first speeds ahead. The clutch C serves to lock the gears O and J with the mainshaft, the female part of it being carried rigidly on the same sleeve that carries the gears O and J. The method of shifting the gears is novel in that they are moved by a pair of short horizontal levers on the tops of rods rising at each side of the steering column, the lever at the right being for second and fourth speeds and that at the left for the first, third and reverse. Each of these levers has connection with the levers P and Q. The operation of the two clutches B and C is from a vertical lever rising through the center of the car foot-board so it can be handled equally well by the passenger in the right or left front seat. On the bottom of this lever is a toothed rack that meshes with the gear I, carried rigidly on the shaft R in front of the case. On this shaft are two spiral cams R1 and R2. The rods V and W, carried crosswise of the gearbox, have dropped arms S and T connecting with collars on



ADAMS CARBURETER

the expanding portions of the clutches B and C, so that by a partial rotation of these rods the clutches can be thrown out or engaged. This rotation is accomplished by having on the forward ends of these rods short arms X which have rollers resting within the spiral cams. Suppose the rod R is rotated forward by pulling the clutch lever back, then the clutch C is engaged and clutch B disengaged; there is, however, a neutral position when both clutches B and C are disengaged.

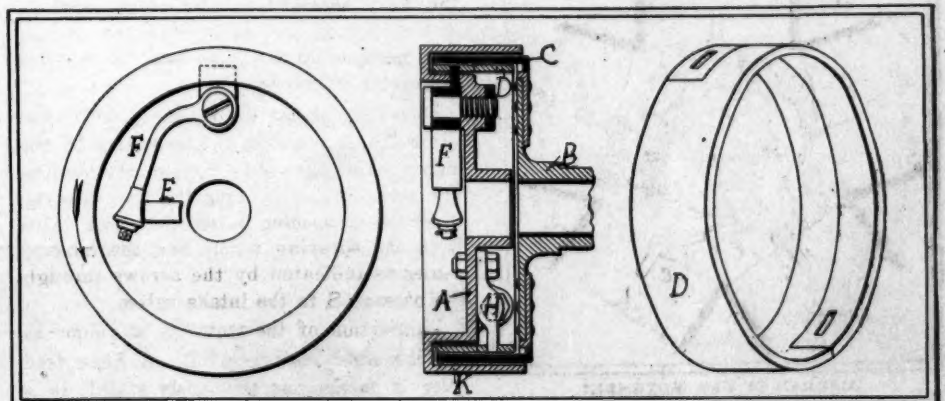
These clutches B and C can be best understood from the illustration showing them in section and with some of the parts separate. Looking at the central or sectional view the part A is keyed to the mainshaft of the gearset and the part B is secured to a sleeve ordinarily running loose on the shaft. Part A has a flange part K, just within which is a cast iron ring C, secured to the part B. Within this again is a split bronze ring D. In engaging the clutch this ring D is expanded and it bears against the ring C, which is also expanded and bears against the ring flange C, so that the part ring C is locked between the rings K and D, giving positive drive. The inner ring D is expanded by the short wedge E, which acts on the lever F.

An interlocker is provided in the gearbox so a gear engaged by a clutch cannot be shifted nor can a clutch be engaged until the gears are perfectly in mesh. This is

accomplished by hooks on the shaft V and W, immediately beneath the shaft P1, with which the levers P and Q connect. These hooks enter the holes in the shafts immediately the clutch is engaged. If the shaft is not in position and the hooks cannot enter the holes the clutch cannot be engaged. The object of this two-clutch gearset is that changes from one speed to another can be very readily made. If the car is driving on the second speed the clutch B does the driving and at the same time the gears for the third speed in the left of the case can be thrown in; then if the driver wants to take the third speed it is only necessary to shift the clutch lever, throwing out the clutch B and engaging the clutch C without any changing of gears. This the maker claims is a great advantage when traveling in crowded streets where very rapid changes from one speed to another can be made. In going up a hill a drop to a lower speed can be made without the car being allowed to lose speed. The gearset is mounted throughout on Hesse-Bright ball bearings, there being one at either end of the main shaft and similar ones as well as a central one in the countershaft. That part of the countershaft carrying the sliding gears is squared; all gears are case hardened and are made with wide face and as in other gearsets an oil bath is used. The lever Y is for operating a ball and socket brake which is carried on the center of the countershaft and runs in oil, and the lever Z is for sliding the reverse pinions, which are shifted to get the reverse drive. On the right end of the countershaft is a sprocket for the single chain drive to the rear axle. Placing this sprocket on the end of the shaft allows of carrying the differential at one end of the rear axle and so increasing materially the clearance.

FRENCH-MADE VIQUEOT

Manufactured at Puteaux, a nearby suburb of Paris, France, and marketed in America by the Viqueot Co., located at 215, 217, 219 West Forty-eighth street, New York city, the Viqueot, a 40-45-horsepower motor car, although not possessing features decidedly different from those found on standard American or foreign cars, has many little points of construction deserving of attention. While the car is being introduced for the first time in



CLUTCH SCHEME ON ADAMS-FARWELL CAR



VIQUEOT CAR WITH LIMOUSINE BODY

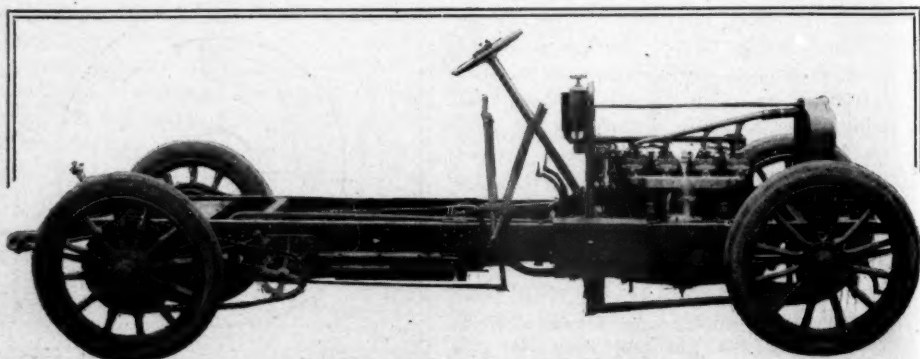
this country, it is a well known make in France, having been built and used there longer than many of the better known foreign makes. Coming from Europe and being a high-powered car, it is not surprising that double chain drive is included in the design, which system of transmission, however, permits of the use of forged front and rear axles, both of the stationary type and made in I-section. In the main frame, channel sections of pressed steel serve for both side and cross pieces, the former being deep at the center, with a gradual front and rear taper. The latter, of medium depth, have integral gusset plates at the ends where they unite and are riveted to the side pieces. The wheel base, not unduly long for a foreign machine, measures 112 inches; front and rear wheels are 34 inches in diameter, and imported tires, 4½ inches in diameter, are regularly fitted.

In the Viqueot motor the only decided novelty is found in the oiling system, all other parts of the car following conventional line, the motor resembling a well built, highly finished American product. It follows the lines of not too generally accepted practice of having the four cylinders cast separately, but returns to well beaten paths in having all parts of each cylinder integral, the valves being disposed on opposite sides, inlets on the right and the cylinder heads and water jackets closely conforming to the cylinder bores and arched tops of the combustion chambers. Placing the valves oppositely—calls for the use of separate camshafts, both of which are enclosed in compartments on the sides of the aluminum crankcase and with the coverings of these compartments separate from the crankcase proper. Each shaft is enclosed by a two-part covering, one for that portion of the shaft opposite the two forward cylinders and the other for the part beside the rear cylinders. These covers are bolted in position and carry on top the brass guides in which the push rods for operating the guides work. Accepted practice is followed by supporting the

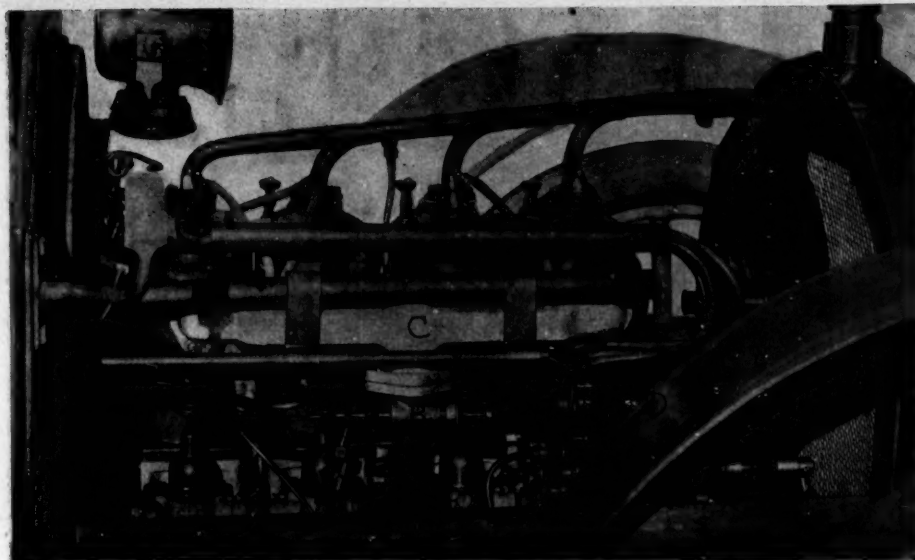
three bearings of the crankshaft on the top half of the case, permitting the removal of the lower portion for inspection or repairs, but in order to still further facilitate inspection, a pair of openings is used in the bottom half of the case, through which access to the connecting rods or crankshaft bearings can be obtained. The crankshaft, a drop forging, revolves on very long plain bearings and has on its rear end, a large integral flange to which the flywheel, serving as the female part of the cone clutch, is bolted. On the front end of the shaft is a small spur gear, keyed in position and which meshes directly with the large fiber gears on the ends of the camshafts. A partial covering for these gears is provided in the form of an aluminum housing enclosing the upper half of the gears and which takes its support from studs projecting from the upper portion of the crankcase. Motor support is taken direct from the main frame, the use of subframe pieces being avoided by having long integral arms on the top portion of the case. These arms are of H-section and are rigidly bolted to the frame pieces. Regarding those moving parts within the motor, it can be said that connecting rods are forgings of the accepted I-section type, being suitably bushed at the piston pin and crankshaft end and non-adjustable at the former and having the connecting rod cap secured in standard form. The piston pin, or wrist

pin, is a variable diameter piece, having three distinct surfaces: In the center of it is a piece of uniform diameter furnishing a bearing for the connecting rod; the pin at the right of this somewhat resembles the point on a lead pencil except that it does not come to a sharp point and that portion of it at the left of the part forming the bearing for the connecting-rod is coned, having a large diameter at the other end, decreasing gradually to almost the diameter of that part forming the bearing for the connecting-rod. The pin is held against rotation to one end of the piston journal by a set screw and lock nut placed vertically in the under side of the journal. The pistons are slightly shorter than used in many cases and have the accepted style of flat top with but three compression rings, all carried close to the top and well above the wrist pin. Valves are made interchangeable throughout and are removable through openings in the top of the ports. The caps are not of the accepted threaded type, but are secured through the intermediary of a central bolt and nut. All valves are slightly arched on top, giving greater depth where the head is united with the stem. The latter, very little longer than the length of the guide in which it operates, is slotted at the base to secure a support for the valve spring. Having the push rod guides very long—leaves practically none of the valve stem or push rod without good support and the portion separating the bottom of the valve stem guide and the top of the push rod guide, is sufficient only for giving support for the valve spring and leaving room for the adjustment nut on the top of the push rod. The bottoms of the push rods are yoked and carry the usual rollers for bearing upon the cams.

In lubrication, the standard style of external mechanical lubricator, driven by either belt or ratchet is dispensed with and instead a vertical plunger pump is carried in the center of the crankcase at the left. It has its plunger operated from an eccentric in the center of the exhaust camshaft. The pump is held in position on a short pedestal in the base of the case and delivers its supply of oil through a single lead to a bank of sight feeds on the top of a reservoir on the dash which is in plain view of the operator. From this five cop-



CHASSIS OF THE VIQUEOT 40-45-HORSEPOWER CAR



RIGHT SIDE OF THE VIQUEOT MOTOR

per leads conduct the lubricant to five parts of the motor; three connecting directly with the crankshaft bearings and the remaining two passing to the housings for the camshafts, each, however, branching into two, one for the front and the other for the rear compartment of each shaft. Crank pins take their oil supply from the three crankshaft bearings through small holes bored in the crankshaft, centrifugal force pressing the oil to these bearings. The pistons are cared for exclusively by the splash. After passing through the bearings and lubricating the cylinder walls, the oil returns to the crankcase and is filtered on returning to the pump.

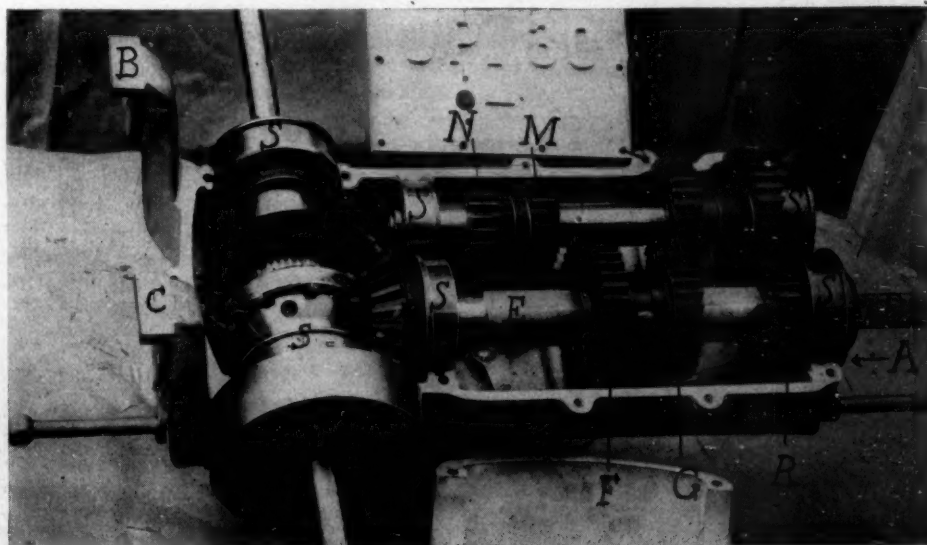
Ignition is by jump spark with spark plugs located vertically in the center of the cylinder heads, which fact combined with the use of an arched combustion chamber, the maker claims gives a quicker explosion than with the spark occurring above the inlet or exhaust valves. Current is taken from an Eisemann, high tension magneto carried on the right front of the motor and driven by a separate shaft which takes its drive from the end of the camshaft through spur gears. For reserve purposes, however, two storage batteries are required and from them the current when used is conducted through a coil on the dash and to the commutator placed on the top of a vertical shaft behind the rear cylinder, the shaft being driven by bevel gears off the inlet camshaft. These gears are enclosed in a small spherical chamber. A glass top is used on the commutator and its cylinder part is of hard fiber, with a customary central brush in the form of a sector. The four radial contact brushes are carried in tubular housings, made from good insulating material. The spark is cared for by a lever on the steering column. When using the magneto exclusively, this commutator is not required, the Eisemann being in itself a complete unit.

Like many other parts of the car, the Viqueot carbureter is not a radical construction but is typical of the present sea-

son, having, as it has, an annular or ring float with a mixing chamber within it thus having a spraying nozzle directly in the center of the float. The gasoline enters the nozzle from the base, coming from a 15-gallon gasoline tank by the force of gravity. The flow of gasoline from the tank to the carbureter can be discontinued by a stop valve beneath the footboard of the car. The throttling portion of the carbureter is a horizontal cylindrical chamber above and inside the float or mixing part. In it is a sliding drum valve under the control of a governor carried on the front end of the inlet camshaft and also responsible to a finger lever on the steering wheel. The governor, of the centrifugal ball type, is connected with the throttle through a rod running to the top of the double-armed lever, the lever at its middle being fulcrumed to the end of the throttle axis. The downward arm connects with the steering column so through it the action of the governor can be reduced to any desired extent or cut out entirely. Cooling of the cylinders is by an enclosed water system, the various parts being: tubu-

lar radiator, gear-driven pump and standard gauge tubing connecting these units. A fan in the rear of the radiator also aids.

As previously mentioned, the female portion of the friction clutch is the coned inner surface of the flywheel rim and the male part is a leather-faced cone of aluminum carried on a hollow shaft within which is the spiral spring for engagement. Clutch control is through a pedal just to the left of the steering column and carried on a cross tube which also supports the regular brake pedal. A universal joint serves to connect the clutch shaft with a short shaft D entering the forward end of the gearbox. In the gearset, which is of the regulation sliding gear type, changes of speed on the selective system are not made, it being essential to pass through speeds when going from a very low to very high drive. The gearcase is a split aluminum housing carried on a three-point suspension, it having a single support A on a tubular cross piece of the frame in front and carried in the rear by two drop arms B and C supported directly on a channel cross piece. Both shafts of the set are in the same horizontal plane and with the top half of the case removed, either can be removed. The final drive being by double side chain, necessitates the carrying of the differential and the central part of the jackshaft in the rear of the case, for which, however, an entirely separate compartment is not used. In all, six standard Hess-Bright bearings are required in the case. These are indicated by the six S's, there being two for the mainshaft E, two for the countershaft and two for the jackshaft. Besides these there are the two end bearings of the jackshaft carried on the frame pieces, making in all eight of this type of bearings in the transmission scheme. Looking more particularly at the gearset, it is found that all changes in speed are made by moving a single sliding unit consisting of the spur gears F and G either to the front or rear through the medium of a side lever at the right of the



SPEED CHANGE GEARSET USED ON VIQUEOT CAR

driver. These gears are made integral with the sleeve uniting them and which has a sliding fit with the squared shaft E. For direct drive the shafts E and D are locked through the intermediary of dental face teeth on the forward face of the sliding unit G and on the rear face of the master gear R. When driving on this speed, the countershaft revolves, gears H and R not being thrown out of mesh. In gaining the other drives gears G and L are meshed for first speed; F and M for second; and F and P for reverse, the latter gear being an idler interposed between F and M. In all drives except direct, power is taken from the shaft B to the countershaft through gears R and H and from the countershaft to the shaft E by means of the sliding unit F and G being meshed with the respective gears. In the top of the gearbox are two inspection plates, one affording access to the gearset proper and the other to the differential. It can be noted that the jackshaft is carried especially low, its end bearings being entirely beneath the side pieces of the main frame and supported in depending brackets therefrom. This method of support places the axis of the

jackshaft but little higher than the center line of the rear axle.

For regular use a band brake acting on a drum on the right end of the jackshaft is operated by a pedal. The steel band of the brake is fiber-lined and the hub of the operating pedal as well as that of the clutch pedal has a face ratchet, both of which interlock when the brake pedal is pushed forward, so that the clutch pedal also thrusts forward. This carries the clutch pedal forward and disengages the clutch. The emergency brakes take the form of internal expanding shoes carried within drums on the rear hubs. The supports for the shoes are on the banjo-shaped ends of the radius rods, the banjo part serving to positively enclose the brake, rendering it dust proof. Application of these brakes is through a side lever with a steel cable equalizer. When applied they disengage the clutch.

Car control rests with seven operating parts, hand-steering wheel, with screw and nut gear enclosed in an oil tight case, a clutch pedal, regular brake pedal, speed changing lever, emergency brake lever, and throttle and spark finger

levers carried on a stationary circle in the center of the hand wheel. The latter levers are locked in a position by an upward extending pin adapted to engage in a series of holes in the circle. In changing the position of either lever, it is only necessary to press down on a small knob on the end of the lever when the pin is disengaged from the hole, the lever being free to be moved to the right or left. Steering knuckles, of the accepted type, are used and the tie rod carried back of the axle is in the form of a large tubing with forked ends for union with the steering knuckle arms. In the Viqueot body, the limousine type of which is illustrated, easy curves and straight lines are suitably blended. The front of the bonnet is formed by a tubular radiator, and access to the motor is through side doors in the bonnet. The touring car styles have many touches of European design, except, of course, those bodies made on this side of the Atlantic. Comfort has been specially aimed at in making the seats roomy, upholstering them in heavy leather with spring and hair, cushioning and providing ample foot-room in front and rear.



THE READERS' CLEARING HOUSE



CHEAP MAGNETOS

Westville, Ind.—Editor MOTOR AGE—Will you please answer through the Readers' Clearing House if it is not practical to design and manufacture a small dynamo or magneto to run from the engine of an ordinary car to take the place of dry battery and furnish current for the coil, one that is compact and reasonable in price? Those used on stationary gas engines are too bulky and not easily applied.—D. W. Weed.

There are several reasonably compact magnetos on the market, and which sell at reasonable prices. A small and reasonably cheap magneto can be used for a low-tension system, but not for high-tension. The cheap magneto, however, is not a profitable investment.

DETERMINING POWER

Brownstone, Ind.—Editor MOTOR AGE—Please give the rule for determining the horsepower of gasoline motors, such as are used in automobiles. I know the formula use in steam engine practice and would like a corresponding formula for gasoline motors.—C. A. B.

An accepted formula for determining the power of a four-cycle motor is as follows:

$$H. P. = \frac{D^2 \times S \times R}{18,000}$$

In the formula H. P. is the horsepower, D the diameter of the cylinder in inches, S

the stroke of the piston in inches, R the number of revolutions of the crankshaft per minute and 18,000 a constant for four-cycle motors. A safe maximum piston travel is 900 feet per minute. A 6-inch piston, then, traveling 900 feet per minute would mean 900 revolutions of the crankshaft per minute. A two-cycle motor of the same dimensions as a four-cycle motor would develop about 50 per cent more power.

COST OF OPERATION

Versailles, Ky.—Editor MOTOR AGE—Kindly give me an opinion as to the difference in cost of operating a 10-horsepower runabout with two cylinders and one with a single cylinder. Gasoline and oil are the two factors I wish especially to know about.—W. C. McCauley, M. D.

There are so many things to be taken into consideration that an opinion would be little more than a guess. Either might be more economical than the other, for there is a vast difference in makes and in workmanship. The carburetor used would have more bearing on the case than anything else; the form of transmission and the weight of the car would be factors of importance. Have the agent selling the respective cars prove economical claims.

REBUILDING A CAR

Portland, Me.—Editor MOTOR AGE—Please state through the columns of the Readers' Clearing House if it will be possible and feasible to replace a single-cylinder motor in a Cadillac car with a double opposed motor. What changes, other than those connected with the motor itself, would be necessary?—X. Y. Z.

It would be possible, but there is doubt as to the feasibility, when the cost is taken into consideration. There would be the cost of the new motor, the labor of installing, probably a new radiator to take care of the larger motor, and other little things that always crop up in rebuilding a car. As a rule it is expensive, as experience has taught. If the Cadillac motor is not doing all the work the writer thinks it should, possibly it needs a thorough overhauling. A single-cylinder Cadillac has the reputation of doing excellent work. If the writer wants a car with more power it will pay to buy a new one, selling the Cadillac or trading it in on the new one.

THE FIRST CAR

Chicago—Editor MOTOR AGE—You will oblige me very much by informing me the date the first automobile known was invented and by whom and where; also the date the first successful automobile was made in America and by whom.—W. H. Townsend.

The motor car dates back many years. It was used in crude form over a half century ago in Europe. Benz probably made the first car in Germany. There are many claimants for honor in America, among them Duryea, Haynes-Apperson, Olds, Winton, Mueller and others. Duryea had a successful car in 1893. An exact detail of motor car development can be obtained in book form.

LEGAL LIGHTS AND SIDE LIGHTS



MINNESOTA CHANGES

The revised code of Minnesota statutes became effective March 1, and an important change is made in the automobile laws of the state. The change does not affect the users of machines, but provides a new disposition of that portion of the license fees which may be known as an emolument of office. The revised statutes, as affecting automobile licenses, provide that the municipalities and townships shall license the machines. Licenses shall be obtained from the township or municipal clerk, instead of from the state boiler inspectors, as heretofore. The license fee remains the same, \$2, one-half of which goes to the clerk, instead of to the boiler inspector, as formerly. The balance of the fee goes into the municipal or town treasury. There are no other changes in the Minnesota law as a result of the revision of the statutes. The law of 1903 is practically reenacted, though in a much condensed form. Speed is restricted to 8 miles in the city, 4 miles over occupied crossings, and 25 miles on other highways. Muffler, bell or horn, light, license numbers at least 4½ inch high, and a full stop when signaled by drivers of animal-drawn vehicles, are among the provisions of the Minnesota laws.

BAY STATE LEGISLATION

The Massachusetts legislature has no end of proposed automobile legislation now under advisement, and during the past 2 weeks frequent hearings on this, that or the other bill have been given by the committee on roads and bridges. There seems to be reason to expect a more lenient law relating to speed. Judging from little things one hears and picks up around the state house it is possible that the speed rate will be increased from 15 to 20 miles an hour in districts removed from thickly settled towns or cities. There is, of course, considerable opposition to this, and there are also those who would brand the violators of the speed law as felons and take from them the right to operate motor vehicles, after they have been once convicted of a violation of this law, but it is readily seen that

such measures are by no means as numerous as they have been in the past, and that the motor is gaining new friends every day. The measures proposed have called forth considerable agitation and energy on the part of the motorists who have been well represented at all of the hearings by the presidents of all of the automobile clubs in the state, officers of the A. A. A. and the Massachusetts State Automobile Association. The work this year in favor of better government of the roads and highways is being carried on in a more judicious, comprehensive and able manner than ever, there being such unity of action as was never known in this state. There is reason to believe that the present law will be changed but little. The scheme of having fines collected for violations of speed law turned over to the state highway commission for the construction and maintenance of good roads, as recommended by Governor Guild, does not of course meet with the approval of many cities and officials, especially those that have in the past made a business of capturing the unwary motorists in the strong meshes of the law, and then securing for their own particular use some portion of the fine levied and collected.

LIMITS GASOLINE SUPPLY

Not more than ½ pint of gasoline may be left in each automobile stored in New Jersey garages, according to a decision handed down by Vice Chancellor Garrison, of Jersey City, in the case of John O'Hara and Catherine O'Hara, of Cottage street, Jersey City, who protested against the maintenance of a garage on the Boulevard near Cottage street by Richard J. Nelson and James Ray. The views of the vice-chancellor are given as follows:

"It is directed to the defendants, their attorneys, agents and servants, enjoining them from storing, keeping, permitting and using gasoline inside of the building occupied by them as a garage until the further order of this court in the premises; provided, however, that until the further order of this court in the premises the said defendants above named may permit sufficient gasoline to remain in the automobiles about to enter the building under their own power; said amount of gasoline

so permitted to remain in each said automobiles shall not exceed ½ of a pint.

"And it is further ordered as a concession in favor of the defendants contained in the above proviso, that the complainants shall be permitted from time to time and at all times to inspect the gasoline tanks of the automobiles about to enter the said building, or actually within the same, for the purpose of ascertaining the amount of gasoline therein."

Protests from garage owners in Jersey City have followed this decision, it being claimed the allowance made, while enough to run a car into a garage will not take it out again, which will make it necessary to push each machine out to the street, as there will be no gasoline left.

FRELINGHUYSEN'S LATEST

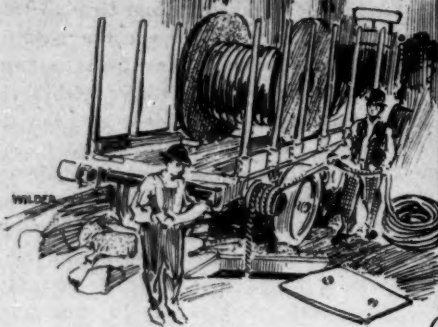
Although Senator Frelinghuysen, of New Jersey, has decided to present a somewhat modified substitute for his former New Jersey automobile bill, opposition to the drastic regulations contemplated is as strenuous as ever. The chief feature of the old bill providing for arrest by constables without warrant for excessive speeding, however, will remain. It is against this that the automobilists are making their chief fight. The greatest change in the substitute will be in the licensing regulations. Instead of taxing the machines on their horsepower or speed capacity, as was proposed in the old bill, the substitute will provide that all machines under 30 horsepower shall pay an annual license fee of \$3, with an additional fee of \$1 for the chauffeur. For machines of more than 30 horsepower the license fee is to be \$5 a year, with \$2 additional for the chauffeur. Provision will be made that part of the money shall be devoted to the state road department for the repair of the highways.

WANT STATE'S PROTECTION

The Massachusetts State Automobile Association, which is part and parcel of the A. A. A., is seeking through the legislature for authority to erect signs and guide boards on the roads of the state. It seems rather singular that the association should take this step and not do the work without such authorization, but its officers considered this the best possible means of procedure, inasmuch as with this authority at its back the removal of such signs as it may erect by unauthorized and irresponsible parties will be prevented, and there will arise no question as to the right of the association to do this work. There is at present on the statutes of Boston a sign board law which is recognized in its breach more than in its observance, and rather than spend its money prosecuting the towns and cities violating the law the officers of the association feel much better good can be gained by making economical expenditures for building and erecting sign boards in the state.



THE REALM OF THE COMMERCIAL CAR



KNOX TRUCK OF THE NEW ENGLAND TELEGRAPH AND TELEPHONE CO., FITTED WITH A WINCH

A KNOX WINCH TRUCK

DOING the work of four men and still performing its regular track service is the brief story of a Knox truck now in the service of the New England Telegraph and Telephone Co., of Boston. The truck carries on the rear part of its framework a double winch, used for drawing heavy wires or cables through conduits. The power of the engine is used in this work and while in operation the truck remains stationary, accomplished by installing a separate clutch, by which the gearing to the wheels is left in neutral position and a separate chain transmission from the motorshaft, thrown into service by the second clutch. In the complete view of the truck in the heading is shown a chain connecting from the end of the crankshaft to a pulley on the regular jackshaft and in the side view of the rear part of the truck is shown a chain connecting from another sprocket on the jackshaft to a second cross shaft a little in rear of the car axle. From this shaft a third chain connects with a third shaft carrying a spur pinion which is geared to a spur gear on the winchshaft. There is thus employed three chains and a set of spur gears in the transmission from the motorshaft to the winchshaft and in each of which a considerable gear reduction is made. The method of bringing the winch into operation is shown best in the rear

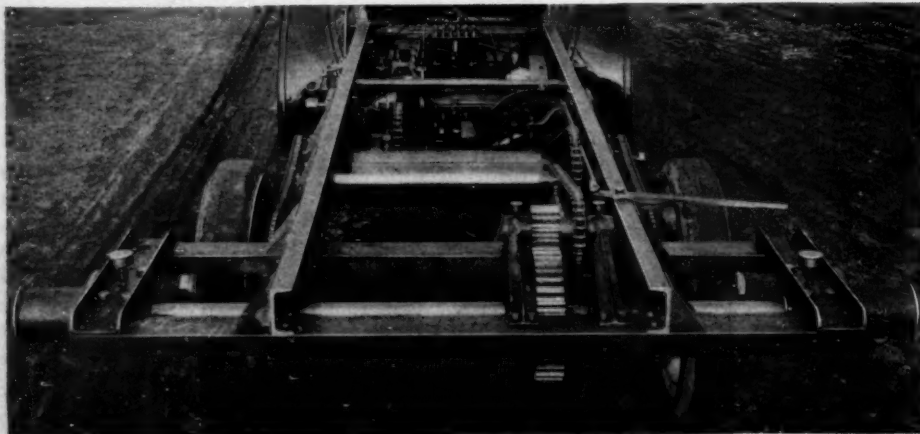
view of the truck, in which is noted at the right over the road wheel a side lever pivoted near its inner end to the top side piece of the main frame. From the inner end of this lever a rod connects with a short arm on the top of a vertical shaft that carries on its lower end a yoke by which the sprocket carrying the chain to the second jackshaft is clutched to the sprocket that receives the drive through the chain from the end of the crankshaft. The construction of this, as well as the sprockets, is best shown in the side view of the back portion of the truck. In order to properly support the winch on the rear part of the truck the main frame side pieces are considerably lengthened and a pair of channel cross pieces are used, the forward one resting directly on the rear ends of the springs and attached to the main frame by angle braces and bolts. The rear cross piece is similarly attached and carried on these cross pieces are two channel pieces for carrying the bearings of the winchshaft. The additional width of the truck necessitated by the presence of the winch is not prohibitive. Oiling of the winchshaft is by separate compression oilers. During its 2 weeks' Boston service the car has shown up to advantage, having transported a load of 3 tons of cable 10 miles an hour and further having drawn by the winches 300 feet of cable through an underground con-

duit in 9 minutes. The truck is of the new Knox design, driving from the motor by single chain to a jackshaft and thence by double side chains. Its body is of the stake variety and is suited for loads of 3 tons.

TO TAP THE NORTHWEST

Partial plans have been completed for an automobile suburban service out of Minneapolis to tap one of the richest farming districts in the northwest. Minneapolis promoters are behind the scheme, and the successful operation of this initial line of buses is likely to be followed by an elaborate system of motor car lines radiating out of Minneapolis and St. Paul, and extending for many miles into the country. The first line is to follow the well-known Osseo road, through Robbinsdale, Osseo, and into the center of the city of Anoka, about 25 miles away. Two twenty-passenger buses have been ordered for the opening of the service, and will make regular trips from the center of the business district of Minneapolis to the center of Anoka.

The efficiency of the service is at once assured. Anoka is a thriving city of nearly 8,000, and the country tributary to the Osseo road is thickly settled, and has good trading interests. The street railway system of the Twin cities has been extended little beyond the city limits, and this territory has been dependent upon railway service, which does not enter Anoka nearer than a mile from the business center of the city. A horse-stage line, operating from the end of the Camden Place car line to Anoka has been in operation over a year, and though only one trip each way is made, it has been a paying institution. With the automobile service, a constant stream of travel both ways is assured. The railroads sold over 30,000 round trip tickets for travel between Minneapolis and Anoka and the other way. There are many well settled localities near the Twin cities easily accessible by automobile over well constructed highways. There has been much talk of suburban trolley line service, but as yet there are no suburban lines of any



CHASSIS OF THE KNOX WINCH TRUCK

length, with the exception of the Stillwater line from St. Paul, and the recently completed Minnetonka line from Minneapolis. The motor buses are likely to be much in evidence about the Twin cities this year.

DESIGNED GASOLINE LOCOMOTIVE

J. J. Troeger, 6332 Peoria street, Chicago, recently patented a gasoline locomotive designed for work on narrow gauge roads where hauling of dirt from excavations, lumber, logs, ore, or similar work is required. The motor is of the vertical four-cylinder type with a rating in accordance with the nature of the work to be done. Combined with the motor is a gearset giving any other number of forward speeds and a similar number for reversing. Instead of using the motor truck only for driving, the power is transmitted to three or four of the other cars or trailers. This is accomplished by a central longitudinal shaft driven by bevel gears from the gearset, transmitting its drive by bevel gears to the truck wheels of the several trailers. It is the intention of the inventor to make use of the first three or four trailers for assisting in doing the pulling and that these will prove capable of drawing at least a dozen other cars. In this way the weight of the locomotive car is very much reduced, it not being imperative to weight it down for the purpose of obtaining pulling traction, as is the case in a steam locomotive.

From the line illustration a general conception of the locomotive can be obtained. The cab occupies the forward part and contains the gasoline motor, water tanks, gasoline tanks, oil tank and operating levers. Almost beneath the motor is the sliding gearset, a friction clutch connecting the motor flexibly with the gearset. Changes in speed are made by a lever working in a plain quadrant. Drive from the gearset is to the large spur gear, a portion of which can be seen beneath the side casing of the locomotive. This large spur gear is on a longitudinal shaft, which can also be seen just beneath the casing. On this shaft are



SIDE VIEW OF THE KNOX TRUCK FITTED WITH WINCH

bevels which mesh with other larger bevels. These large bevels are rigid with spur gears that mesh with other spur gears on the axle shafts. This outlay is well shown in the plan view of one of the trucks, in which the central drive shaft, which couples with that to the locomotive, is shown, as are the two bevel gears on it. The connection between the drive shafts in the several cars takes the form of a universal joint, so that the cars can round any curve without interfering with the drive. For pulling purposes there are other connections yoking the cars together. The inventor claims that a 2-ton gasoline locomotive of this type will have a greater traction force with its four driven trailers than an 11-ton steam locomotive with but four wheels to do the pulling.

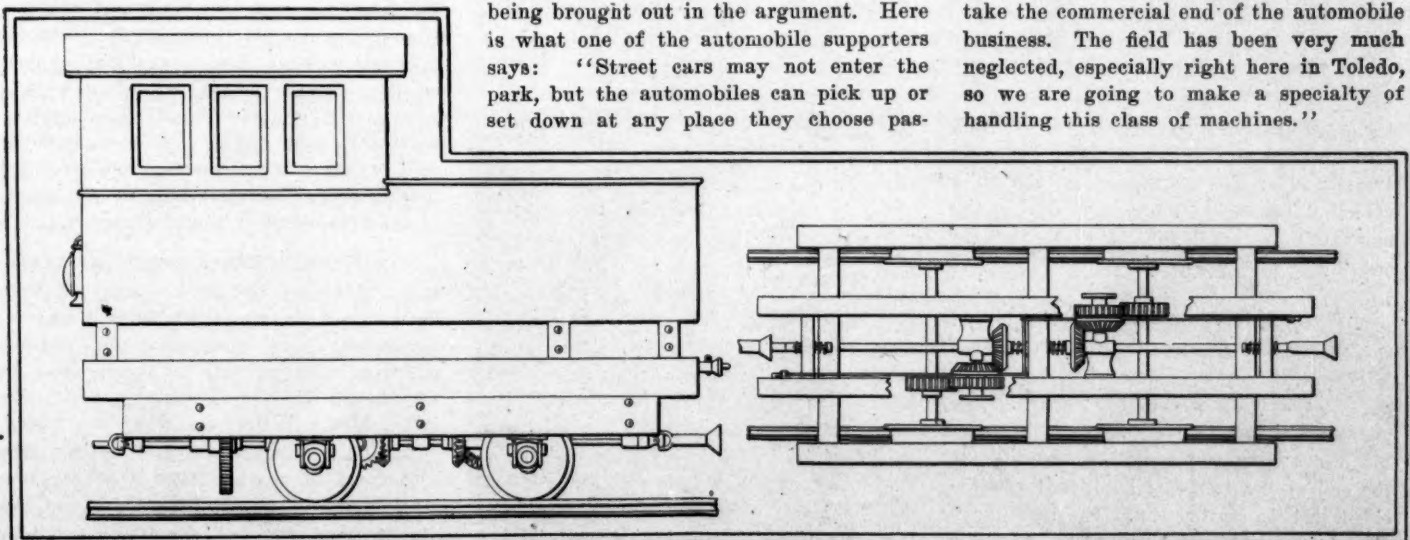
PICKS GOOD FIELD

At Watertown, N. Y., it is a fight between automobiles and street cars. C. W. Gray is endeavoring to establish an automobile bus line in streets where cars do not run at present and the street car men are trying to stop him with the plea that they will touch all necessary points if they can get a franchise. A petition is now being circulated by the automobile supporters to give the automobiles a chance. Some strong points in favor of the commercial automobile are being brought out in the argument. Here is what one of the automobile supporters says: "Street cars may not enter the park, but the automobiles can pick up or set down at any place they choose pas-

sengers who instead of paying their fare to be let off at the entrance and then toiling up the steep hill will be taken by the automobile to the park direct in a condition to enjoy the summer weather. Property which does not lie in the immediate vicinity of the street cars cannot be benefited by the trolley road while if the automobile buses are a success it will be only a matter of months before buses are running all over the city, giving a general service that could not be expected of the city in 50 years."

FIGHT FOR RIGHTS

"It's the commercial vehicle that will afford the most lucrative field in the future," says Edward A. Kirk, Toledo, Oo. "In selling a touring car the man carefully looks over the machine, takes a ride, and takes in the full explanation and description of the car. Then he must have his wife see the new vehicle, when she may raise objections to color, the tonneau, or something else. The same story is told again, then the car may not be sold. With the commercial vehicle, there is but one to deal with, and that is the man who is to buy the machine for his business. It isn't a question of color or shape so much that he looks at, but if the machine will do the work—he is ready and willing to buy on the spot. I will take the commercial end of the automobile business. The field has been very much neglected, especially right here in Toledo, so we are going to make a specialty of handling this class of machines."



SIDE AND PLAIN VIEW OF TROEGER'S GASOLINE LOCOMOTIVE

From the Four Winds



DR. CARVER IN A CADILLAC GAPPING THE GAP AT LOS ANGELES, CAL.

New Club in Italy—The Naples Automobile Club has been formed, with forty on the charter list. The principe di Piedimonte has been elected president.

Tennessee Statistics—According to the automobile directory issued in a neat leather-covered book by the Ford Garage, of Nashville, Tenn., there are 492 automobiles and motor cycles in the state. It is noticeable that in Nashville alone there are fourteen electric buses operated by the Union Transportation Co. The book also contains the Tennessee automobile law.

Hard Word to Pronounce—The word chauffeur is bothersome to Syracuse lawyers. Attorney LeRoy B. Williams, one of the best educated men in the city, had a hard time in court recently. First he called it shayfore, then chiffer, then shofure, then sh-over and finally in order to make the judge and jury understand what he meant he compromised on automobile driver which every one understood.

Novel Reason—In explanation of the popularity of the automobile in Goldfield, Nev., a Spokane mining engineer lays it to the scarcity of water. It costs 25 cents every time a horse or mule is watered, and hay, too, is correspondingly high, so the miners find automobiles to be quite cheap in comparison. This Spokane man says he has seen as many as twenty automobiles standing on the main street of Goldfield at one time during the summer.

Stopped by a Senator—The non-stopping Rambler which covered 1,383 miles in 96 hours 6 minutes February 20-24 in Philadelphia, was stopped by State Senator Vivian S. Gable, who pulled out the switch plug in front of the Rambler branch. The car started out to do only ten centuries but the engine was going so smoothly at the end of the 1,000th mile that it was decided to keep up the run. The roads were almost impassable and one place, 12 miles from Lancaster, the car sunk to the axles in

a hole, it taking 1 hour 20 minutes before the car was finally extricated by its own power without stopping the engine.

Certainly a Record—It is claimed for Nappanee, Ind., that there is an automobile owned there for every 100 inhabitants. The population is given at 2,300.

After Road Race—Long Island farmers cannot be much opposed to automobiles, for Supervisor Jones, of Nassau county, has asked Chairman Morrell that the next Vanderbilt cup race be run again over the Nassau course.

Invents Airship Device—A. Roy Knabenshue, of Toledo, O., has invented a new device which will lessen the danger of navigation in the air. The aeronaut has not made known the details of his new invention, but he says that it will do away with the dipping of the airship as it strikes different air currents.

Regarding Cup Thieves—Charles Jarrott, of the English firm that had to stand for the theft of the Pyrenees cup from the Olympian show, writes *MOTOR AGE* as follows: "I have read with interest your remarks in the last issue of your journal, which I have the pleasure of receiving, which gives a notice to the effect that the London police were moving in the hope of securing the thieves who stole the Pyrenees cup from our last Olympia exhibition. The theft was a particularly clever and daring one, the cup being taken off the stand when the watchman's back was turned, at 7:30 o'clock in the morning, and carried out by a special exit door, put on a van and broken up and melted down the same day. The detectives worked 4 weeks on the case before they got a single clew. We not only lost the cup but had to bear the cost of prosecution as well as pay the \$250 reward for the detection and capture of the thieves. On the latter point I have no regret, as the detectives thoroughly earned it, but the wicked breaking up of such a beauti-

ful work of art as the Pyrenees cup undoubtedly was, could, in my opinion, be only properly punished by giving the offender penal servitude for life."

Farmer-Motorists—In pleasing contrast with all the motorphobist statements coming out of Indiana is the one that states that half the automobiles in Henry county are owned by the farmers themselves.

Ask State Aid—Applications have been made to State Highway Commissioner Earle, of Michigan, for state aid for roads aggregating \$63,000. There is available for this purpose not more than \$70,000 in addition to the money received from automobile licenses.

Romantic, Anyway—It is related in Philadelphia that Joe Kachline, one of the drivers of the Rambler non-stop car, took the \$100 he received for smashing the record and used the money to pay the expenses of his honeymoon, pretty Pearl Rankin having promised to be his bride if he was successful.

Both Sides Rational—Farmers living near Junction City, Kan., recently petitioned the automobilists of the town to be careful in driving over the country roads. The paper was received by the motorists in the same friendly spirit it was presented and a resolution adopted pledging members of the Junction City Automobile Club to aid in every manner possible the prevention of accidents.

Talk Hill-Climb—It is believed Pennsylvania motorists will have no trouble in swinging the proposed hill-climb which will be one of the features of the celebration of the 100th birthday of Wilkes-Barre, Pa., May 10, 11 and 12. W. J. Morgan may manage the event, application for a sanction having been made to the A. A. A. The city is only 7 to 10 hours' ride in an automobile from New York and the hill itself sufficiently steep to make the event interesting.

Queen Gives Up Trip—From Rome it is officially announced that the proposed tour of the United States by Queen Margherita has been abandoned. No reason was assigned, but on this side of the Atlantic the reports have it that the Italian government heard rumors of an anarchistic plot to kill the queen mother, emanating from Paterson, N. J. Investigation is said to have shown some grounds for believing there was something to the story, so the automobile trip was given up.

Mrs. Wetmore Passes Away—Mrs. Catherine Chetwood Wetmore, mother of John C. Wetmore, *MOTOR AGE*'s New York correspondent and prominent in eastern motoring circles, died of pneumonia at Elizabeth, N. J., February 25. The late Mrs. Wetmore was a granddaughter of Colonel Francis Barber, who served on General George Washington's staff during the revolutionary war and was also descended from John Chetwood, who was New Jersey's first chief justice. Her-

father, Major Chetwood, was a member of congress. Mrs. Wetmore was 84 years of age at the time of her death.

From Sport to Trade—Robert Hochmelle, the secretary of the sporting commission of the French Automobile Club, and who had the lion's share of the work in connection with the various big French races during the past few years, has resigned his position in order to occupy himself actively with the trade.

Wise One, That Earle—A number of supplements are being prepared for rural newspapers of Michigan by State Highway Commissioner Earle. These give the laws relating to the construction of good roads by state aid, and other information in regard to the improvement of highways to which it is desired to give publicity.

Early Beach Meet—The Atlantic City Automobile Club announces a beach meet for the latter part of April. Contests for every sort of machine from runabouts up to racing cars will be contested. There will also be gymkhana contests and races on the reverse gear. Atlantic City boasts a grand stand that will accommodate 7,000 people.

What Are They There For?—Colonel Frost, chief of police of Evanston, Ill., while preparing for another anti-scorching campaign, has declared automobiles damage macadam more than do heavy trucks in that "the heavy wheels driven at a high speed loosen the top layer of the pavement and crack it more quickly than the heaviest teams."

Medals for Motor Cyclists—The Federation of American Motocyclists has decided to offer three medals for mileage and touring this year, the competition starting April 1 and closing November 30. The touring medals go to the motor cyclist visiting the greatest number of counties in the United States. M. E. Toepel, 930 Columbus avenue, New York, is handling the affair for the F. A. M.

Miniature Car—Stewart Leland, a 16-year-old boy residing in Lexington, Ky., has finished a miniature touring car which is said to be complete in every detail. It is about 18 inches in length, 7 inches in width, 8½ inches in height and weighs 4 pounds. The tires are made of ¼-inch gas tubing. The motive power is furnished by an Ajax battery. The boy, who is a son of a minister, started work on the toy last June.

Gaps the Gap—Dr. Carver is astonishing the natives at Los Angeles, Cal., with his startling feat of gapping the gap in a Cadillac runabout, a second-hand machine which he bought recently after it had seen 6 months of hard service on the road. He has made the jump a dozen times and it is said the springs, axles and frame are in as good condition as the day the machine left the factory. The feat consists of a run down an incline which

terminates in an abrupt upward curve in the segment of a circle, then a leap of 30 feet to a platform.

Clever Advertiser—Gotham rubbernecks had a joke played on them the other day. Remembering how a crowd always flocks around disabled automobiles, a keen business man sent out a horse-drawn automobile and of course a big crowd collected. While the wits were having a merry time with their gibes the man in the car was laying for them. At every outburst he would hold up to view a card with the advertisement of a dentist on it. In this way the ad was presented to at least 10,000 people during the afternoon.

Oak Park's Claims—One of Chicago's suburbs, Oak Park, claims to have the greatest number of automobiles of any community its size. At the present time there are ninety-one machines, with prospects for fifteen or twenty-five more being added this summer, which will mean an investment of \$200,000, giving one car to every 150 residents, or a car for every thirty families. Of the lot there are six persons owning more than one car. George W. Hayden is the pioneer of the town, having bought a steamer 7 years ago.

Portland Show—The recent motor show at Portland, Me., had fifty exhibitors, many of them with motor boats. Among those who had automobiles were the following: Maine Motor Carriage Co., Thomas, Stevens-Duryea and Oldsmobile; H. J. Willard Co., Packard, Peerless, Winton, Buick, Franklin, Cadillac and Elmore; H. C. Stratton Co., American Mercedes; J. A. Dowling, Pierce, Fiat and Studebaker; Herbert A. Harman, White; Boston Motor Co., Acme and Merkel, and F. M. Prescott, Crown. Those exhibiting tires and accessories were: James Bailey Co., Angier

Co., United States Automobile Supply Co., The show made a hit in Portland, being well attended every night of the week.

Congress Dates Set—The next session of the international congress will be held in Paris March 24-29, the body consisting of the mayor of Milan and representatives of the automobile clubs of America, Austria, Italy, France, Belgium, Denmark, Germany, Spain, Switzerland and Russia.

Good Chauffeurs Wanted—The cry for good automobile drivers is still clear and insistent in New York. In spite of the commendable work done by the automobile schools and the constant crop of drivers turned out by the factories, New York dealers say the supply is not nearly equal to the demand at the beginning of the touring season. The want columns of the daily papers are filled with calls for good drivers and the keepers of the large garages say they are continually seeking competent men for their customers.

Car-Wrecker Jailed—J. H. Toole, Chicago representative of the Orient, has made an example of Will Davis, his negro porter, who made free use of a couple of Toole's cars. Davis first took out a buckboard last Saturday night without permission, then returned and got an Orient touring car, with which he started to do the black belt. He had never driven a car before and the result was he smashed into the curb with the big machine and knocked it about generally and almost put it out of commission before he was apprehended. Toole determined to push the case and Davis got enough to hold him for awhile—\$100 and costs, which means the greater part of a year in the bridewell, for the fine must be worked out at 20 cents a day. Chicagoans feel this prosecution will be a warning to others.



THE RAMBLER NON-STOP CAR—SENATOR GABLE STOPPING THE MOTOR

GOSSIP AMONG THE MAKERS AND DEALERS



IMMENSE SIGNBOARD 200 FEET LONG AND 12 FEET HIGH ERECTED BY RALPH TEMPLE ON ONE OF CHICAGO'S BOULEVARDS

Re-Covering Tires—Re-covering tires by the Volties system has been installed at the quarters of the National Supply Co., 1630 Market street, Philadelphia.

Consolidation—The Duluth Electric & Construction Co. and the Duluth Automobile Co. have consolidated and at 210 West First street, Duluth, Minn., will handle the White, Buick, Maxwell, Pope-Waverley, Cadillac and Reo.

Finds New Location—The Burt Mfg. Co., of Kalamazoo, Mich., plans to locate its plant in a new building at Fulford and Clinton streets, where the business of manufacturing gasoline engines and automobile tire setters will be continued on a larger scale.

Running Nights—The Monroe Body Co., of Pontiac, Mich., is now devoting its entire attention to the manufacture of automobile bodies and is running nights to keep up with the demand. The limited capacity of the plant has made necessary the turning down of a number of orders.

Grossman in Charge—Joseph Grossman, who has held the position of advertising manager and purchasing agent of the National Sales Corporation, selling agent for Soot-Proof plugs, Connecticut coils, plugs, switches and motors, Dodge lubricators and timers and Geecce batteries, has succeeded E. J. Kuegeman as manager of the company.

Stock Increased—The Salisbury Wheel & Mfg. Co., of Jamestown, N. Y., manufacturer of automobile wheels, has voted to increase its capital stock from \$50,000 to \$100,000. The stockholders also decided to add more machinery and build a large addition this spring, as the present factory is running 22 hours per day and has been for the last 3 months. This rush is expected to keep up until July 1.

Weber Makes Changes—The Orlando F. Weber Co., Chicago representative of the Pope line, has been making some innovations in its place. For one thing, the garage has been banished, the only space retained for the storing of cars being a corner for demonstrating rigs only. This will give Weber needed room and the entire floor will be devoted to salesroom purposes, giving about 7,500 feet. The company has also taken on the Babcock

electric, and will also handle the line of boats made by the Oshkosh Boat Co., samples of which are expected this week.

Snutzel in for Himself—Paul L. Snutzel has resigned his position with the Gaulois Tire Co. and the D. A. C. Supply House and will handle imported accessories and supplies.

May Go to Belvidere—The Automobile Engine & Power Co., of Chicago, capitalized at \$100,000, is considering locating its plant at Belvidere, Ill., a representative of the company now being in that town looking over the prospects.

Levino Moves Up—A. S. Levino, formerly advertising manager of the Maxwell-Briscoe Motor Co., of Tarrytown, N. Y., has been made supervisor of the central district, which also includes western New York, Pennsylvania and West Virginia. He will have charge of the agents in this section.

New Service—E. B. Gallaher, importer of Brasier cars, announces he has organized a continental touring service whereby he will box and ship cars, attend to the customs and deliver the cars any place on the continent. He will arrange routes, secure licenses and place insurance on the machines. He will also forward mail, engage chauffeurs and otherwise smooth the way for the tourist.

Enlarging at Hartford—Work at the Hartford factory of the Electric Vehicle Co. has been facilitated by the opening of the new addition to the plant which is devoted to the repair shop, battery department and an extension of the blacksmith shop. The factory now has a total of 225,000 feet of floor space. The space formerly occupied by the repair shop is now used for the assembling of electric vehicles.

Big Damage Award—The board of commissioners appointed to appraise the value of the land owned by Thomas B. Jeffery & Co., at Kenosha, Wis., and the damages to the automobile concern by the building of Chicago & Milwaukee railway through it has awarded the Rambler people damages to the extent of \$50,508. The award was made on the grounds that the proposed 100-foot-of-right-of-way of the railway would prevent the Rambler mak-

ers extending their business as they had planned without great loss and inconvenience to them.

Southern Open Air Show—Dealers at Savannah, Ga., held an open air show at the local race track Tuesday, the speedway being used for the purpose of giving demonstrations.

Babcocks and Oldsmobiles—The Kirk Brothers Automobile Co., which will open a garage within a short time on Jefferson avenue, Toledo, O., has taken the agency for the Babcocks and Oldsmobiles. The Kirks intend handling a line of commercial vehicles.

Sid Black in South—The Sid Black Automobile Co., of Cincinnati, will also run an establishment at Chattanooga, Tenn., having leased a three-story building at 225 East Fourth street, where the Thomas, Franklin, Buick and Oldsmobile will be handled. The company will also do a renting business.

Tire Move—The Iowa Vulcanizing & Tire Co., which will be run in connection with the Davenport Automobile Co. at Davenport, Ia., has been organized by Ourey Jansen. A. B. Craft, formerly with the Fisk people, will install the plant and manage it.

Rainier Branch—The Rainier Co. will shortly open a Philadelphia branch which will be managed by A. J. Picard. The Rainier Co. has also placed the following agencies: Van Automobile Co., St. Louis, for the state of Missouri and southern Illinois; Paxson Motor Car Co., Cleveland, O.; A. H. Hayes, San Francisco, Cal.; Plaza Automobile Co., Brooklyn; T. S. Morse, Lenox, Mass., Berkshire district.

Indianapolis Agencies—All agencies for 1906 have been placed in Indianapolis. A singular fact in connection with this year's agencies is that practically every dealer is handling a line different than that he carried last year. Automobile representatives are now as follows: Fisher Automobile Co., National, Premier, Stoddard-Dayton and Maxwell; Indiana Automobile Co., Winton, Cadillac, Autocar, Peerless, Thomas, Olds and Franklin; Gibson-Short Cycle & Auto Co., Marmon, Reo and Ford; D. B. Sullivan Auto Co., Queen and Mitchell; H. T. Hearsey Vehicle Co.,

White, Rambler and Pope-Waverley; Federal Motor Car Co., Stevens-Duryea and Buick; Columbia Electric Co., Leader; A. J. Johr, Richmond.

Removal Notice—The Gearless Transmission Co. announces the removal of its factory from Glen Falls, N. Y., to Rochester, a move made necessary in order to supply the demands for its gearless transmission. It requests that all communications be sent to Rochester.

Garage Men Organize—A new organization, to be known as Toledo Automobile Dealers, has been formed at Toledo, O., for the purpose of regulating prices. Every garage man in the city has joined the organization with but one exception. The rules and regulations of the new organization became effective on the first day of the month.

Electric Officers—The election of officers of the recently organized Electric Vehicle Manufacturers' Association resulted in George Pope, of the Pope Mfg. Co., Hartford, Conn., being made president; George Studebaker, of the Studebaker Automobile Co., South Bend, Ind., vice-president; Robert McLloyd, of the Vehicle Equipment Co., New York, secretary; M. L. Goss, of the Baker Motor Vehicle Co., Cleveland, O., treasurer.

Motor Boat Exhibitors—For the Chicago Power Boat show which is to be held in the First regiment armory April 7-14 the following boat manufacturers have taken space: Truscott Boat Mfg. Co., A. G. Cuthbert, Racine Boat Mfg. Co., Western Launch & Engine Works, Hunter-Weekler Boat Co., Madison Boat Co., Frederick P. Neumeister, Chicago Motor Launch Co., Michigan Steel Boat Co., Detroit Boat Co. Engine manufacturers to exhibit are: Lake Shore Engine Works, Charles P. Crouch & Co., Lamb Boat & Engine Co., Buffalo Gasoline Motor Co., A. H. McDonald, Hol-

iday Mfg. & Engineering Co., Carl Anderson Co., Regal Gasoline Engine Co. Accessories: Whiteley Steel Co., Central Electric Mfg. Co.

Seventh Winton Branch—The Winton Motor Carriage Co. has decided to open a branch in Pittsburg, with Earl Kiser as manager and John S. Johnson, like Kiser, an ex-bicycle champion, as assistant. This will make the seventh Winton branch, the others being in London, New York, Boston, Philadelphia, Cleveland and Chicago.

Buckeye Garage—By the first of the month the Buckeye state will have one of the finest automobile garages to be found in the middle west. The Atwood Automobile Co., of Toledo, O., is erecting the building, 100 by 200 feet in size, and fire-proof, being constructed of brick and concrete. An open floor space of nearly 13,000 square feet will not contain a single post. In this space at least 100 cars can be cared for without any crowding. However, if necessary, 150 cars can be stored at the garage. Gasoline cars will be kept on one side of this spacious room, while the electric vehicles will be cared for on the other side, where thirty-six charge plugs are provided for the purpose of charging that many machines at one time. The main entrance to the garage is 20 feet wide, and is provided with two 10-foot interlocking doors, which slide upward in opening. On the right of the entrance is the private office, which is provided with a window that gives full and comprehensive view of the main room. Then there is the general office, the women's rest room, toilet rooms, locker, stock room, sales room, repair shop with three pits, machine shop, tire room, blacksmith shop, wash room with turn-table, oil room and battery room. The whole garage will be flooded with plenty of light, as a broad skylight will extend the entire length of the building. The company will

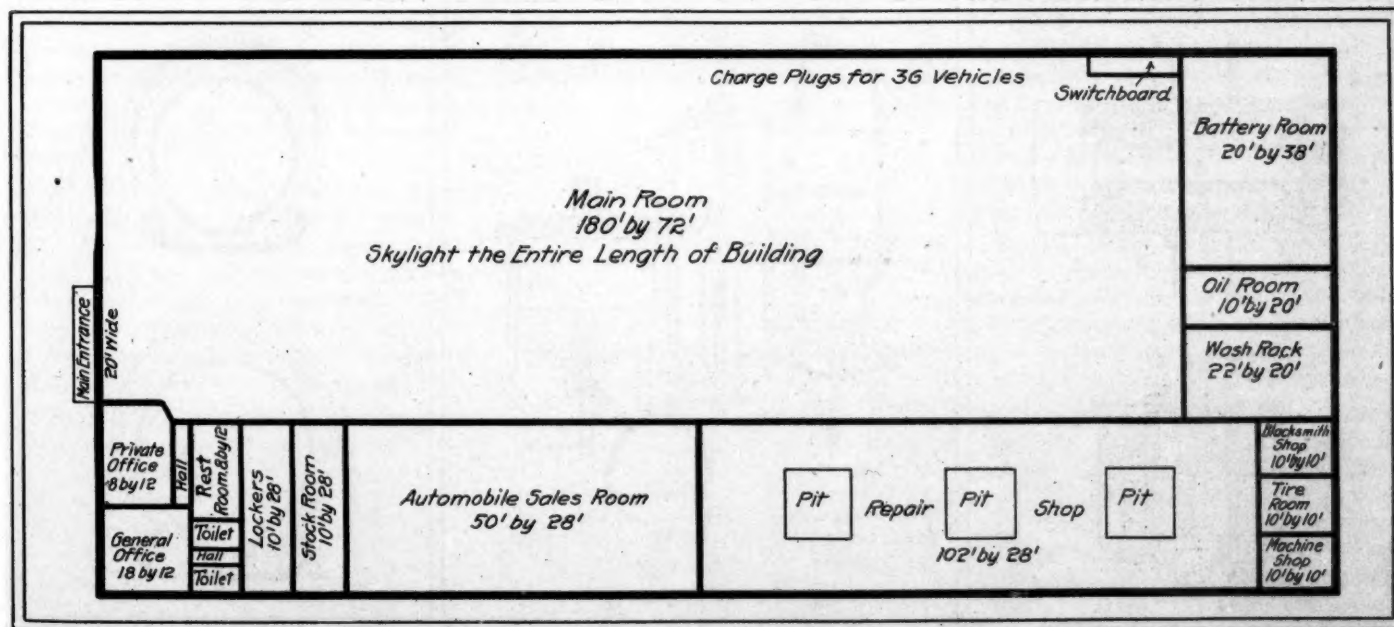
act as agent for seven different lines of automobiles.

Aerocar in Gotham—The Aerocar Co., of New York, has been formed to care for Gotham territory for the Detroit air-cooler. A large sales room has been opened at Seventy-third street and Broadway, where the Aerocar will make its home.

Gigantic Sign—What is claimed to be the largest sign in the world advertising automobiles has just been erected in Chicago by Ralph Temple. It is 200 feet long—a full city block—and 12 feet high and is erected on the Lake Shore drive near Addison. On it are depicted life-size pictures of the Reo, National, Premier, Panhard, de Dietrich and Hotchkiss cars handled by Temple. So huge is the sign that the photographer had to use three plates to take it all in.

New Ford Agencies—Tom Hay, manager of the Chicago branch of the Ford, has named several new agents in his territory, among them being the following: Pioneer Automobile Co., Benton Harbor, Mich.; S. D. Iseninger, Bloomington, Ill.; Cole & Son, Rockford, Ill.; J. W. Hall, Arcola, Ill.; J. G. Barnard & Son, Logansport, Ind.; L. W. Spaalkoepf, Madison, Wis.; Quincy Automobile Co., Quincy and Springfield, Ill.; W. A. Marshall, Hoopes-ton, Ill.

Show Week Surprise—One of the show week surprises at Philadelphia was the announcement of the establishment of a local branch of the Mercedes Import Co. Salesrooms have been secured at the southeast corner of Broad and Race streets, formerly occupied by the Cortland Wagon Co., and after necessary alterations have been made the 1906 Mercedes will be installed and the branch opened for business. H. B. Stillman, formerly of the Quaker City Automobile Co., has been appointed manager of the new place.



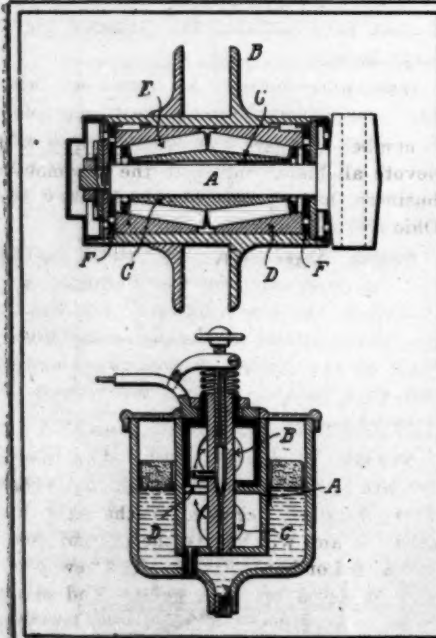
GROUND FLOOR PLAN OF THE GARAGE OF THE ATWOOD AUTOMOBILE CO. OF TOLEDO, OHIO

Current Automobile Patents



Adjustable Carbureter—No. 813,653, dated February 27; to Fred A. Law, Hartford, Conn.—The throttle A of this carbureter performs four distinct functions. It opens a series of ports B by which the explosive mixture passes to the motor; it controls another series of ports C by which outside air is permitted to enter the mixture by way of the ports D and turning upward past the valve controlled by the diaphragm E passes through the port C and unites with the mixture in the mixing chamber; when given a vertical movement it raises a needle valve F which at its lower end controls the flow of gasoline; the lower end of it, when raised, uncovers additional air ports G in the base of the mixing chamber. It will thus be noted that giving a circular movement to the throttle A brings into use the passage B to the motor and C for additional outside air. Giving it a vertical movement performs the dual role of increasing the flow of fuel through the nozzle and bringing into operation the additional outside air ports G. With the motor operating at slow speed, all of the air required enters through the vertical tube H, which surrounds the spraying nozzle. It will be noted, because of the expansions K and L in the sides of the chamber containing the throttle A, that the latter is of the balanced type, giving free throttle movement.

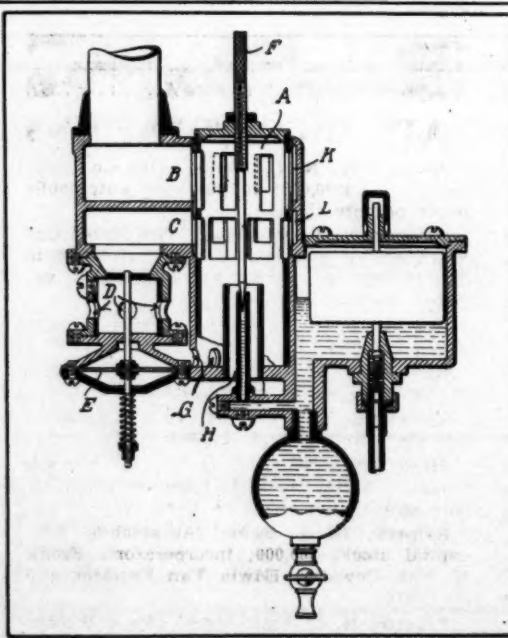
HYATT BEARINGS



ADAMS' CARBURETER

Compact Carbureter—No. 813,683, dated February 27; to Earl E. Adams, Battle Creek, Mich.—This carbureter, conspicuous because of its compactness, has the mixing chamber A suspended concentrically in the float chamber. It consists of an upper half with an opening B through which the mixture passes to the motor and the lower half C through which the air enters. Separating these compartments is a diaphragm partition with an opening in it, the size of which is controlled by an air valve. The spraying nozzle is carried in the center of the compartment and delivers its fuel through a horizontal side passage leading into the upper compartment and directly above the air entering the partition in the diaphragm. The usual type of revolving valve throttle is used for controlling the flow of mixture and simultaneous with throttle movements is the regulation of the spraying nozzle.

Hyatt Bearings—No. 813,905, dated February 27; to Charles S. Lockwood, Newark, N. J.—The bearing is of the roller type and in the illustration is shown in connection with an automobile hub. A is the journal or axle of the car; B the hub shell for receiving the spokes of the wheel; C is a double cone, tapered toward opposite ends and riding on the shaft A, being keyed thereto; DD are tapered sleeves feathered to the hub part B. Between them and the cone C are the rollers



LAW'S CARBURETER

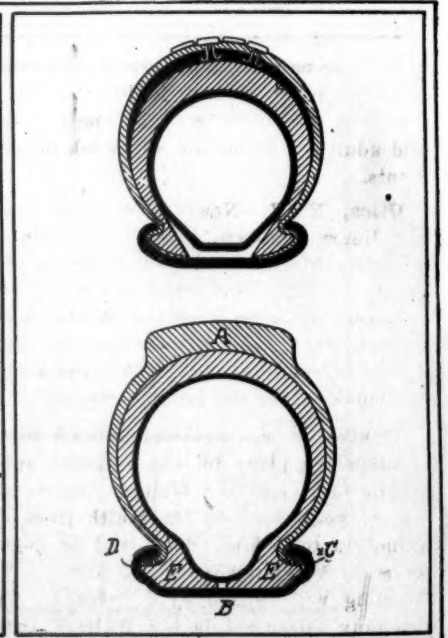
E for supporting the load. Screw collars F are threaded into the hub part for adjusting the cones D and shoulders for taking up the end thrust are furnished. The lubrication of the bearings is either by packing in grease or compression cups.

Tire Protector—No. 813,900, dated February 27; to Emile Lapisse, Elbeuf, France—This protector, designed as a covering for pneumatic tires, consists of a strip of leather or rubber A made very thick over the tire tread and having heel pieces adapted to engage between the lips E of the outer tire casing and the hooks of the rim B. These heel pieces carry metal plates, one shown at C between the heel and the flange hook and the other shown at B between the heel and the lip of the tire. The covering A is not vulcanized or cemented to the outer casing.

Pneumatic Tire Cover—No. 813,934, dated February 27; to Josef Albers, Aix-la-Chapelle, Germany—This cover is a continuous piece of leather covering the entire surface of the tire casing including the tire lips and is vulcanized in position. On the tread portion of it are four series of metal clamps held in place by double-pointed, internally clenched rivets. The tread portion is further reinforced by a crescent strip interposed between the leather covering and the outside of the tire casing.

Emergency Tire—No. 813,529, dated February 27; to Russell G. Smith, Buffalo, N. Y.—This emergency tire takes the form of a flexible band made to be put on the rim of a wheel after the pneumatic has been removed. It consists of a series of blocks or sections arranged side by side and fastened to a band adapted to slide over the rim of the wheel. This band is in turn fastened to the rim by radial bolts inserted in the lug holes.

ALBERS' TIRE COVER



LAPISSE'S TIRE COVER

BRIEF BUSINESS ANNOUNCEMENTS

Omaha, Neb.—Kimball & Powell have completed a new garage.

Buffalo—David W. Sowers has been appointed receiver for the Niagara Motor Vehicle Co.

Newark, N. J.—The Newark Garage and Repair Co. will occupy its new place at 213-215 Clinton avenue.

Newark, N. J.—The Motor Car Co., of New Jersey, intends enlarging its present plant, work to begin May 1.

Newark, N. J.—The Greene Motor Car Co. has removed to its new garage and salesroom at 88-90 Washington street.

Hartford, Conn.—The Electric Vehicle Co. has just finished an addition to its factory which will give the plant 225,000 more square feet of floor space.

Binghamton, N. Y.—A new block is being erected on Avery street by Frank Howe. The lower floor is to be used as an automobile garage and repair shop.

Hartford, Conn.—The Hartford Rubber Works Co. is operating two shifts of workmen, and the plant, which was recently enlarged, is running 24 hours a day.

Peoria, Ill.—J. A. Holsman, until recently president and general manager of the Illinois Auto & Parts Co., has resigned from active management of the company.

Baltimore, Md.—The Mt. Vernon Motor Co. has recently been incorporated here. Thomas C. Goodwin is to be the manager of the new concern, which among others has obtained the agency for the Haynes.

New York—Frank C. Menair, formerly associated with the White Sewing Machine Co. in selling White automobiles in upper New York, is now interested with Louis C. Howard in the sale of the Jackson in this city.

Westfield, Mass.—Plans are being made for the construction of the additions to the Pope plant, to include an addition 70 feet long to the drop forge department, and additions to the die and stock departments.

Utica, N. Y.—News notes from Ilion say Henry H. Bassett, who has been in the office of the Remington Arms Co. for nearly 15 years, has resigned his position to accept an offer from the Weston-Mott company, of Utica, manufacturer of automobile accessories. He will become assistant manager for the latter company.

Trenton, N. J.—Architect Abram Swan is preparing plans for the proposed automobile factory of the Walters Automobile Co., to be located on the Smith tract, in Hamilton township. Work will be begun as soon as the weather permits. The building will be 100 by 300 feet. The company interested is the Walters Automobile Co., recently incorporated. It was at first proposed to use the old plant of

the Consumers' Brewing Co., but this was found to be inadequate for the purpose.

Bridgeport, Conn.—The Ariel Motor Truck Co., of Boston, has leased the plant of the Bridgeport Silk Co.

Chicago—The Northern Motor Car Co. is now occupying the entire building at 1449 Michigan avenue.

Boston—The F. E. Wing Motor Car Co., agent for the Marmon, formerly of 66 Stanhope street, has taken new quarters at 12 Motor Mart.

Newark, N. J.—The Auto Vehicle Co. removed its salesrooms from Orange street to the company's new building at 213-215 Clinton avenue. The Calvert-Zusi Co. also occupies part of the building.

Pueblo, Colo.—Plans are being made for a new garage of the old Spanish mission style of architecture. The garage will be 100 by 70 feet. When completed it will be occupied by the Pueblo Automobile Co.

Detroit—J. P. Lavigne, president of the Lavigne Mfg. Co., 132-134 Larned street, east, is looking for a site for a new factory to be devoted entirely to the manufacture of the Lavigne mechanical oil pump.

Cleveland—Announcements have been made that the White Sewing Machine Co. will build a new garage in New York city. Land has been purchased on West End avenue, and a six-story building on this will be removed, to be replaced by a garage.

Baltimore—An agency for the Oldsmobile has been opened at 531 North Howard street by Oliver Light and C. D. Purroy, ex-fire chief from New York city. An extension is being made to the building, which was recently erected, and an automobile school, the first in Baltimore, will



LATE INCORPORATIONS

Jersey City, N. J.—Manly Drive Co.; capital stock, \$200,000; to purchase automobile letter patents.

Newark, N. J.—Pneumatic Tire Shield Co., 81 Orange street; capital stock, \$200,000; to manufacture pneumatic and other tires, vehicles, engines, machinery, etc.

Detroit—The Co-Operative Garage; capital stock, \$100,000.

New York—Automobile Maintenance Co. of America; capital stock, \$200,000.

Louisville, Ky.—The Kirchdofer Automobile Co.; capital stock, \$10,000.

Jersey City, N. J.—Ariel Co., 471 Newark avenue; capital stock, \$150,000; to manufacture motor cars, etc.

Rahway, N. J.—Eagle Automobile Co.; capital stock, \$80,000; incorporators, Frank G. Van Dewater, Edwin Van Dewater and A. Gibby.

Trenton, N. J.—Consumers' Tire & Rubber Co., 142 Market street; capital stock, \$200,000; to manufacture tires, hoops, hose fittings, rings, etc.

be carried on in connection with the garage business of the concern.

San Francisco—The Pioneer Automobile Co. has taken the agency for the Olds.

Boston—The Baker-Cormerais Co. has taken the agency for the Reliance, both pleasure and commercial.

Philadelphia—The Rittenhouse Garage, formerly the Wanamaker automobile station, has been entirely renovated.

Chicago—A. D. Kennedy has been added to the selling forces of the Buick Motor Co.'s Chicago branch, 1412-1414 Michigan avenue.

New York—Frank H. Bowen, formerly with the Wayne Automobile Co., has been appointed manager of the Ardsley Motor Co., Broadway and Fiftieth street.

Washington, D. C.—The Motor Car Co., of Baltimore, has opened a branch here. The company is the representative for the Peerless and Stevens-Duryea.

Newark, N. J.—Coburn & Belden have taken the agency for the Peerless. In addition they intend to carry a full line of automobile supplies.

Boston—The Mercedes Import Co., of New York, has decided to establish a branch in this city, its officers having selected M. Stillman, formerly of the Pope company, as its resident manager.

Newark, N. J.—The Roseville Motor Co., composed of Henry Seblon, E. U. Mott and George M. Barnes, expects to take the agency for one or two makes of automobiles, in addition to its storage and repair business.

New York—The famous American Horse-Exchange at Broadway, Seventh avenue, Fiftieth and Fifty-first streets has been sold, and it is said that several of the importers have acquired the property for a large garage.

Cincinnati—Joseph A. Montfort, who has been secretary to the postmaster for a number of years, has resigned and will devote all his attention to the automobile business, having accepted an agency for Ohio and Kentucky.

Boston, Mass.—Alvin T. Fuller, agent for the Packard and the Cadillac, has dedicated his new quarters. He has a spacious sales and show room in the Motor Mart at the corner of Columbus avenue and Park square, and his repair shop is situated on the second floor.

Newark, N. J.—The Essex Automobile Co. has leased the building at 79 Orange street, formerly occupied by the Auto Vehicle Co. and will vacate the present quarters at 9 Lombardy street. The new place will be fitted up as a garage and salesroom. The concern handles the Jackson, for which C. A. Oathout is the eastern agent. The change will be made soon.

American Motor League



OFFICERS

ISAAC B. POTTER, President.
Potter Building, New York.

CHARLES E. DURYEA, First Vice-Pres., Reading, Pa.

JOHN A. HAWKINS, Second Vice-President, Pittsburg, Pa.

FRANK A. EGAN, Secretary.
132 Nassau St., New York.

FREDERICK B. HILL, Treasurer.
83 Binford St., Boston.

National Headquarters
Vanderbilt Building, New York

THIS LEAGUE
Is Now Collecting Route Information

covering all automobile routes in the important states and will publish road books for motor car users as fast as complete information is received. The A. M. L. is the only organization engaged in this work, and it invites the co-operation of all persons interested. For full information and membership blanks address American Motor League, Vanderbilt Building, New York City.

In every city, town and village the American Motor League wants at least one representative to look after its affairs in an active way. Consuls are appointed by the president for this purpose. Several persons in the same place may form a consulate or board of consuls, being in effect a club—organized for a purpose. The league has adopted this term consulate as distinct from club because it intends that the work of these local bodies shall be a credit to the organization and it also intends that this credit shall be neither misunderstood, misapplied nor misappropriated. Thus far the work of the average club has not been highly effective and many complaints have been heard that the membership dues, ranging from \$5 to \$50 per year, have been out of all proportion to the benefits enjoyed or the work accomplished.

Witness now the splendid work of the Pittsburg consulate of the league. Its dues are nominal—being only \$1 per year in addition to league dues. It maintains no expensive or elaborate headquarters—they are not needed. It was organized and is maintained with the sole view of performing useful work for automobiling, and it commands the respect and applause of every motorist in the country. Now to go back a little, we have said that a consulate and a league club are substantially the same thing. Whether called by one title or another, its relation to the league entitles it

- 1.—To receive back from the league a portion of the dues paid by all the league members in the state.
- 2.—To elect one or more representatives to the state board of officers.
- 3.—To elect its own officers, adopt its own constitution and by-laws, maintain its own headquarters and manage its own affairs.
- 4.—To direct and superintend the putting up of sign boards and danger signals to warn and guide tourists and travelers in the locality where the club or consulate is situated.
- 5.—To lead and direct the agitation for better roads and streets in the home city, town or county, and for the passage and maintenance of fair and reasonable laws.
- 6.—To prepare maps and descriptions of all local routes and to send them to the national and state organizations, to be incorporated in the books of routes and tours printed for the use of the league at large.
- 7.—To protect its own members against the operation of arbitrary, unreasonable, oppressive and unlawful acts, and to make such provision for their comfort, convenience, entertainment and social enjoyment as may be deemed proper.
- 8.—To maintain a proper communication with the national and state bodies of the league and with other clubs and consulates on subjects of mutual interest.

To organize a consulate is an easy and simple matter. Five members are enough to begin with, though the consulate will of course be stronger and more useful as its numbers increase. As soon as five league members have been secured for the purpose of organizing, or five who have agreed to become members, call them together and hold the first meeting. If the city or town contains a considerable number of automobilists, the preliminary work will be made easier by selecting a few of the prominent and influential ones who will act as a voluntary committee. Have these men sign a brief call, inviting all others to meet at a convenient hour and place for the purpose of organizing a consulate within the American Motor League.

When the meeting is convened elect a chairman and a secretary in the usual way, appoint a committee to prepare the constitution and by-laws, and authorize the secretary to communicate with the secretary of the A. M. L. with the view of enrolling the consulate and its members on the official list at league headquarters. The members present at the first meeting will be charter members of the consulate. If the form of constitution and by-laws has been practically agreed upon before the meeting it can be adopted at once, and your officers and representatives to the state board elected at the same meeting.

As soon as a list of consulate members is sent to the national secretary the latter will send to each member of the consulate a membership card, if not already sent, and also a consul's certificate under the seal of the league and the secretary will remit quarterly to the consulate its due share of the funds received from every league member in the state. Each consulate and each league club thus receives back not only a share of the dues received from the members of the local body but a part of the dues received from all members in all parts of the state. In this manner every league member in the state is compelled to contribute to the useful work performed by the local organization. The league recognizes the fact that many of its members cannot conveniently unite with local bodies, and many others do not care to do so; but in view of the fact that all are benefited by the putting up of guide boards and danger signs, and by

other local work of the consulate, it is proper that the league dues paid by all should be proportionately divided among the consulates by whom the good work is performed.

An automobile club may become an A. M. L. club and thereby enjoy the same rights, privileges and benefits as are had by consulates, including a participation in the distribution of league funds. In every city and town where a club has been formed the league observes a friendly comity toward the existing body, and will take no steps to form a consulate in such town until an earnest and friendly invitation has been first sent to the local club and its action taken upon the proposition to join forces for the common good. In the event that it is found necessary to form a separate A. M. L. consulate in such a town, the league policy will be at all times to encourage the most friendly relationship and coöperation between the local bodies.

An automobile club may become a league club by adopting an amendment to its constitution providing that each member of the club shall be a member of the American Motor League. Each club member then receives his membership ticket in the A. M. L. and his consul certificate. The club is then qualified in all respects to act as a consulate of the league and no board of consuls will be formed in any city or town which contains a league club, except upon the consent, request or recommendation of the club itself.

A printed form of constitution with suggestions for the formation of consulates will be sent by the secretary on the request of any member or other person interested in this work.

The league wants members in all parts of the United States and Canada—men of character and earnest intent. It is growing from month to month and its growth means power for the cause and increased benefits for everybody. The dues are nominal—\$2 per year for each member. There is no initiation fee. The league has acquired and is acquiring many benefits for its members, and will gladly send printed matter to any inquirer who will address American Motor League, Vanderbilt building, New York. This is the time to get busy booming the league.